

# **Applying investment appraisal techniques to assess profitability of franchise purchases as major capital budgeting expenditures**

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<p>This Bachelor's thesis examines the profitability of an investment project in franchise purchase decisions. The study primarily aims at analyzing the investment projects that have already been, or are about to be implemented at Trade House "Europa", a retail fashion company operating all over Russia. The main objectives of the research are to provide well-grounded suggestions on realizing the investment project, and define further investment recommendations for the company in the form of guidelines for the company's investment strategy.</p> <p>The study is divided into two main parts - a theory part and an empirical part. The theory part discusses various investment appraisal methods used in investment decision-making processes. The empirical part deals with applying appropriate investment appraisal techniques to assess the profitability of the franchise investment project. The study was based on discounting investment appraisal methods. Two face-to-face interviews with a representative of Trade House "Europa" were conducted to get familiar with the investment decision process of the company and obtain necessary information on the franchise investment projects. The first interview included eight open questions, and was carried out in the form of a dialog. For the second interview, a preliminary financial checklist was formed. The company's financial data of the first half of 2014 is used for the research purposes.</p> <p>The interviews highlighted good investment practices that already existed in the company, as well as opportunities for improvement. According to the results of the interviews, the company had serious problems with one of their franchise investments and was seeking for the most efficient solutions for it. The findings indicated that the main problem of the investment lay in poor location decisions and insufficient customer analysis.</p> <p>Using the investment appraisal methods to assess the profitability of the potential investment, the study demonstrated that store relocation would be the best solution for Trade House "Europa". Moreover, as a result of the research, investment strategic guidelines for the company were developed. The guidelines were created to optimize the investment decision-making process at Trade House "Europa". The guidelines were developed specifically for a company working with franchise investments and they may not be commonly applicable to companies in other industries working with different investment types.</p>	
<b>Keywords</b> Investment project, Capital budgeting, Franchise, Investment appraisal methods, Net Present Value.	

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# 1 Introduction

## 1.1 Background

The case company - Trade House "Europa", is a market leader in the Kaliningrad region, working in retail industry and selling a wide range of fashion products from clothing to accessories. It partners with clothing companies by purchasing either their franchise rights or rights to sell under their names (the platinum scheme) (see page 25). The partners are located within the European Union - in Germany, Italy, Poland, France and Spain. The company was initially selling solely in the Kaliningrad region, however, now it successfully expands its business to the mainland of the Russian Federation. Nowadays, the company is a representative of a large number of franchising clothing brands throughout its business area. (Boyko 3 July 2014)

As the share of the market of the company is quite large, it differentiates its customers and provides solutions for different social classes - from economical and low-priced products to high-quality luxury goods. (Boyko 3 July 2014)

The mission at Trade House "Europa" is to provide their customers with the most appropriate for them products at the right time and in the right place while ethically promoting the brands of the company's various suppliers. (Boyko 3 July 2014)

As mentioned before, the case company operates in the Kaliningrad region, which is a federal subject of Russia on the Baltic coast. Kaliningrad is one of Russia's best performing regional economies with a low manufacturing tax rate as set by its "special economic zone" (Ketels 2004, 3).

As a special economic zone, the region provides a number of advantages for the businesses operating there (Ketels 2004, 19, 24; Ministry of Foreign Affairs of the Russian Federation 2012, 21).

- Import duty/VAT for goods coming in duty when taking out products after processing to the territory of the customs Union – 0% till 1.4.2016.
- VAT system and duty exemptions make production costs 35% lower than in other Russian regions.
- Foreign products imported to the region with 30% local added value are considered locally made goods.
- Number of habitants/investors: Kaliningrad has low population rate, but with the beneficial policies, they have attracted many investors from foreign countries.
- The advantage of location: The business is close to Poland and Germany which have high population rates and quite high GDPs/capital (especially in Germany).
- The variety of lifestyles creates diversified demand.

- Low rental fees.
- The import tax is very low, resulting in the value of the imported goods increased. The share of Russian imports reaches 2.8%.

Trade House “Europa” has a franchise agreement with an Italian clothing brand - Terranova. They opened six shops all over Russia. One of them is located in Samara. Unfortunately, due to several reasons that will be discussed later in this research (see chapter 5.1), the store brings constant losses. Therefore, the company’s executives are seeking for solutions for this problem. One of the ways to resolve the problem is to close the shop and make an investment to relocate it and change an operation mode to ensure stable profits. The research will further analyse this investment project, and will also provide additional information on previous investment projects carried out by the company. Some of them are extremely successful and working already for 13 years, whereas others have been a real burden for the company. Going through these projects will make it possible to benchmark good practices when making strategic investment decisions and avoid making investing mistakes in the future.

## **1.2 Research questions**

The current thesis is a research oriented thesis, aiming at defining further recommendations for the company. The research is based on the case company and will include face-to-face interviews, personal observations of industry and common practices, thus presenting qualitative thesis type.

The research problem (RP) is defined as “Applying investment appraisal techniques to assess profitability of franchise purchases as major capital budgeting expenditures”. Thus, the research question (RQ) is interpreted as “How to determine whether an investment project should be undertaken using investment appraisal techniques?”

The RQ is quite broad, therefore, to make it easier let us divide it into four (4) investigative questions (IQs):

- IQ1: How the investments are usually assessed in the case company? (The question helps to investigate the practises of investment appraisal, and if any, identify breaches and misuses of the appraisal techniques)
- IQ2: What are the good and bad practices the company experienced with investing in franchises before? (Benchmarking possibilities for improvement and common practices)
- IQ3: What are the ways to provide the better and more realistic overview on the investment project?
- IQ4: How to avoid past failures and develop a successful investment strategy?

To better understand how research methods are connected with the topic and how they are applied during the research process, let us look at the overlay matrix for research-oriented thesis (San Miguel 2014, 33). The matrix is specifically adjusted for the topic in question and the progress stage (table 1):

Table 1. Overlay matrix

Investigative Questions (IQs)	Relevant chapter	Theoretical Framework	Data Analysis
1: How the investments are usually assessed in the case company?	4	Investment appraisal techniques NPV	Interviews Personal analysis Common practices
2: What are the good and bad practices the company experienced with investing in franchises before?	4	Franchise Franchise agreement	Interviews Personal interpretations Industry practices
3: What are the ways to provide the better and more realistic overview on the investment project?	5	Classification of investments Discounting investment appraisal techniques Investment appraisal techniques under uncertainty	Interviews Research through observation and finding imbalances
4: How to avoid past failures and develop a successful investment strategy?	6	Investment planning Investment strategy Monitoring and control	Data assessment based on the interviews, interpretations and theoretical models

### 1.3 Demarcation

As a rule, when talking about an investment project, the issue of sources of finance is raised. Although the research investigates the profitability of an investment decision, it does not concentrate on how to raise money for an investment, assuming that the company has enough resources to invest, and sources of finance (financing with debt or equity) do not have any impact on the investment decision. Therefore, it is important to demarcate all the concepts and theories concerning financing options and strategies.

There is a number of concepts and models that should be excluded in order to keep the research within the limits. In this research all the investment projects that the case company has already implemented and is going to implement are assessed based on discounting investment appraisal techniques and investment techniques under uncertainty. Moreover, the investment projects in question are implemented separately, one by one, and are financed mostly by debt. Taking into account the above-mentioned criteria, a wide

range of non-discounting appraisal techniques and multi-criteria methods are omitted due to their irrelevance for the research.

In order to apply the investment appraisal techniques an accurate and consistent data is essential. Some data is easier to forecast than the other. Such data can be only determined by thorough and detailed planning that could be a separate topic for a research. Therefore, it should be mentioned that the calculations in this research are based on the already forecasted by the case company data.

Most of the time investments are looked at from a point of view of independent individuals or establishments that can be combined under the concept of venture capital investors. Venture capitalists are external investors who put money into a business seeking to receive much higher yields from the investment (Ward 2014). If a traditional investment can create about 4% rate of return (Ludwig 2009), the rate of return in a more risky investment in a start-up or business expansion can reach 25% or more (Ward 2014). However, this research concentrates rather on the company's internal investments in its business expansion, and thus, the perspective of an appropriate rate of return is different. Here we shall assess the investments from the company's point of view rather than independent venture capitalists' point of view. As a result, all the concepts related to external investing and venture capital have no value for the research and are to be omitted.

#### **1.4 Key concepts**

The concept of capital budgeting is a starting point of this research paper.

As defined by Götze, Northcott & Schuster (2008, 6.), "The decision process usually is called capital budgeting and relates to long-term capital investment programmes and projects that must be assessed by investment appraisal."

An investment project is a subject of capital budgeting that can be explained as follows.

"An investment project is a series of cash inflows and outflows, typically starting with a cash outflow (the initial investment outlay) followed by cash inflows and/or cash outflows in later periods (years)." (Götze et al. 2008, 3.)

Any investment project always starts with a substantial cash outflow, which is called initial outlay. Initial outlay includes the purchase price, all discounts received, as well as costs related to the purchase itself. Usually, the initial outlay of a project is easily determined, however, it should be remembered that all the indirect costs and revenues related to the investment project are to be added to the initial outlay (Götze et al. 2008, 78.).



The strategic objective of an investment project is to maximize the company's wealth. However, it always strongly influences the company's cost structure, and therefore needs to be thoroughly evaluated and analyzed with the help of various investment appraisal methods.

According to Röhrich (2007, 3.), the investment appraisal methods can be generally divided in non-discounting (the time value of money is neglected) and discounting methods (the time value of money is considered). Those methods imply that all the necessary information is relatively certain, which in reality is not possible. Therefore, those methods can only be used with limitations (see chapter 2).

In this thesis, some of the discounting methods of investment appraisal together with appraisal methods that incorporate uncertainty are used.

### **1.5 International aspect**

The case company has suppliers mostly in Europe, but also in the Commonwealth of Independent States (CIS) member-countries. The scope of this Bachelor thesis is to analyse the franchise purchases as major capital budgeting expenditures. The franchise issuers of the case company are located in Spain, Italy, France and Germany. Therefore, the research outlines the business practises of at least five different markets.

International aspect of the research is depicted through the potential scope of its application. As a matter of fact, the outcome in the form of strategic investment guidelines for the company can be suitable for other companies working in different business environments, under the assumption that the company-specific modifications are made to the guidelines.

### **1.6 Anticipated benefits**

The goal of the research is to determine the profitability of a certain investment, which in the case of this research is a purchase of a foreign franchise, and to develop a comprehensive investment strategy that the case company can use to assess its future investment projects. According to the goal, six objectives are distinguished and briefly articulated as follows:

- Benchmark good investment practices existing in the company.
- Identify weak spots and opportunities for improvement in the present investment strategy (if such strategy exists).
- Introduce suggestions for improvement based on the data previously acquired.

- Assess the new investment project by calculating its profitability with help of investment appraisal techniques and tools.
- Advice on realizing the investment based on weighty arguments and calculations.
- Develop the final investment guidelines for the company based on the data obtained through the research.

The above-mentioned objectives represent six major consecutive stages that should be followed during the research process.

After those stages are successfully completed, the final outcome for the case company is to be created and communicated to the executives. At the end of the research, it is expected, first of all, to analyse the investment project and come to decision about implementing the project, and second of all, to create a complete company-tailored investment strategy in the form of guidelines.

### **1.7 Risks and risk management**

Risk management is an important part of every project, as it allows identifying and preventing risks before they even happen. Thorough risk management can save time and effort in the end of the research and ensure that the final outcome is trustworthy and relevant for the case company. Although it could be challenging to recognize all the risks, simple awareness of their existence and readiness to react accordingly can help with handling risky situations.

This research itself tries to answer the question, whether the investment project is of a high risk, and thus, worth investing in. Some risk appraisal techniques, like sensitivity analysis and simulations, are to be used to investigate this investment question. Therefore, it is even more crucial to make sure that the risks related to the research process are clearly established from the very beginning.

The six major stages in the research process have been listed before, which help to evaluate risks that are likely to occur at each one of the stages. This method, called risk categorization, assists in selecting the stages that are more likely to be exposed to risks. Categorizing those risks under certain stages helps to understand their nature and manage them by developing consistent responses (Clarizen Team 2014). The stages, related risks and responses to them are listed as follows (table 2):

Table 2. Risk management

<b>Research stages</b>	<b>Risks</b>	<b>Responses</b>
Benchmark good investment practices existing in the company.	Lack of data Lack of understanding	Prepare carefully before interviews Form comprehensible and relevant questions Agree on follow-up interviews, if necessary
Identify weak spots and opportunities for improvement in the present investment strategy (if such strategy exists).	Lack of data Lack of understanding Difference in perspectives	Establish what good/bad investments are from the executives' point of view
Introduce suggestions for improvement based on the data previously acquired.	Distorted data Outdated results of the analysis Impossibility to realize the suggested improvements	Carefully analyse the data and create suggestions in accordance with the needs of the company
Assess the new investment project by calculating its profitability with help of investment appraisal techniques and tools.	Lack of data Calculation errors	Recheck the calculations
Advice on realizing the investment based on weighty arguments and calculations.	Wrong decisions made	Take time to analyse the data acquired Discuss the progress with the executives
Develop the final investment guidelines for the company based on the data obtained through the research.	Difficulties in analysing the data Data overload Mismanaged data Lack of time	Limit the scope of the research Create a schedule and adhere to it Make sure that the guidelines are coherent with the company's strategy Report to the executives in order to receive feedback

## **2 Investment appraisal**

In literature, there are numerous books and articles that talk about investment decisions and appraisal methods. Investment decision-making is an important process, characterized by its complex and uncertain nature. Since 1960s this topic has become the central subject of research for many reliable authors. At that time various approaches on effective investment appraisal methods have been developed, and later revised and further refined.

The theoretical framework initially introduces the general classification of investments and investment appraisal methods that are closely linked together. Understanding the nature of an investment project helps to determine the most appropriate appraisal technique to be used. Therefore, it is crucial to start with reviewing the classification of investments before continuing with appraisal methods.

### **2.1 Classification of investments**

Classifying an investment project allows to better determine the appraisal techniques that are most suitable for this particular investment. There are different classifications of investments existing nowadays. This research will look closer at the classification described by Götze, Northcott & Schuster (2008, 3-6.). Investments can be classified according to their type, possible causes for investment, operational area, level of uncertainty and other characteristics (Götze et al. 2008, 3-6.). The detailed classification of investments is provided in Appendices (see appendix 3).

### **2.2 Investment appraisal methods**

As have been mentioned above, there is a division between non-discounting and discounting appraisal methods. Although non-discounting methods can give a quick overview of a profitability of an investment project, they do not consider the whole life of a project and the time value of money invested (Röhrich 2007, 4.). Therefore, they are not to be used in this research.

Determining a suitable for the investment project combination of the appraisal techniques derives from determining the class of the investment project. The choice of the investment appraisal methods for this research are shaped by the classification of investments by Götze (2008, 4.) and include some of the discounting appraisal methods and investment appraisal methods under condition of uncertainty. Discounting methods allow comparing cash flows from different periods at a specific point of time either by discounting them to the present value, or compounding them to the future value (Götze et al. 2008, 51.).

- The discounting factor  $(1+i)^{-t}$ .
- The compounding factor  $(1+i)^t$ .

Where:

$i$  = Interest

$t$  = Number of periods.

From now on, to make the results clearer and easier to analyze, all the cash flows from the investments described in this research are discounted to the beginning of the project ( $t = 0$ ).

### **2.3 Net Present Value (NPV) Method**

Net Present Value method, or simply the NPV method, is a discounting investment appraisal technique that shows that a project with a potential to generate the biggest net present value is to be chosen. The net present value is any monetary gain that a project earns considering the time value of all cash inflows and cash outflows of this project (Götze et al. 2008, 54.).

In different words, any project is worth implementing if all cash inflows from the project exceed cash outflows. All cash flows are to be discounted to the present value at a certain discount rate. The discount rate can be determined by the market rate of interest, cost of capital or the opportunity cost. Depending on how an investment project is financed, companies use different rate basis or a combination of those. For example, if an investment is financed with only external debt, the interest rate is the interest paid on the borrowed capital. For a mixed financing, different techniques, like weighted average of cost of capital, can be used. (Röhrich 2007, 63; Götze et al. 2008, 81.).

One of the most commonly used discount rates is weighted average cost of capital, or WACC. The WACC includes in the calculation all capital sources used by a company - common stock, preferred stock, bonds and any other long-term debt. The WACC also takes into account the proportional weight of each of the capital sources. The weighted average cost of capital shows the amount of interest a company has to pay for every euro it uses to finance an investment project. Therefore, the WACC shows the minimum discount rate a company should use to cover the interest (Investopedia 2013).

The general formula for calculating the weighted average cost of capital is shown below (Investinganswers, 2014).

$$WACC = \frac{E}{V} * R_e + \left( \frac{D}{V} * R_d \right) * (1 - t)$$

Where:

E = Market value of the company's equity

D = Market value of the company's debt

V = Total Market Value of the company (E + D)

R<sub>e</sub> = Cost of equity

R<sub>d</sub> = Cost of Debt

t = Tax rate

The NPV is calculated by discounting all the cash flows to their present value (t = 0), initial outlay does not need to be discounted any further, if made in the beginning of the period when an investment project is launched. Generally, the NPV formula can be presented as follows (Röhrich 2007, 64.).

$$NPV = -C_0 + \frac{C_1}{(1+i)^1} + \dots + \frac{C_n}{(1+i)^n}$$

Where:

-C<sub>0</sub> = Initial outlay

C = Cash flow

i = Discount rate

n = Number of periods

Under the NPV method, it is assumed that the discount rate remains the same throughout the whole life of the project (Götze et al. 2008, 54.).

Some investments can be resold at a certain salvage value, or liquidation value at the end of their economic life. In order to determine an accurate NPV of a project it is important to take into account the liquidation value of an investment. The formula is then further revised (Götze et al. 2008, 55.).

$$NPV = -C_0 + \frac{C_1}{(1+i)^1} + \dots + \frac{C_n}{(1+i)^n} + \frac{L}{(1+i)^n}$$

Where:

L = Liquidation value.

So far, the formulas presented did not consider the existence of taxes. Any investment generates profit/loss therefore profit-dependent taxes need to be included in calculations of the NPV. The profit-dependent taxes are general taxes for any company, calculated in proportion to the profit made in a period. These taxes usually apply marginal tax rates that differ according to a country's legislation (Röhrich 2007, 151; Götze et al. 2008, 111.). In accordance with the tax implications a new formula is stated as:

$$NPV = -C_0 + \frac{C_1 - t * (C_1 - D_1)}{(1 + i * (1 - t))^1} + \dots + \frac{C_n - t * (C_n - D_n)}{(1 + i * (1 - t))^n} + \frac{L - t * L}{(1 + i * (1 - t))^n}$$

Where:

D = Depreciation

t = Tax rate.

Depreciation is only considered due to the tax implications, and taxable income is calculated by subtracting cash flow with depreciation. After deducting tax payables from the taxable income, depreciation is added back (Röhrich 2007, 152.).

As an investment appraisal technique, the NPV is a relatively easy and reliable way to determine the profitability of an investment. The NPV method compares the realized investment project with the missed opportunity of investments on the capital market. NPV is straightforward in interpreting the results and visualizing the benefits of a project. In case of financing with a company's own resources, a positive NPV indicates that all the resources used have been paid back and an additional profit made. When financed with debt, a positive NPV shows that the borrowed amount has been repaid, the interest covered, and a certain surplus additionally generated (Röhrich 2007, 64.).

Two American economists – Franco Modigliani and Merton Miller proved in their theorem that the profitability of an investment cannot be influenced by the nature of the funds used to finance this investment. In practice it means that, from the profitability point of view, it makes no difference whether the investment is financed only by equity or debt, or a combination of those. Therefore, according to the Modigliani-Miller theorem, the means of financing a project are not important in the NPV approach whatsoever, as they do not influence the nature of benefits received from the investment, and thus, have no impact on strategic investment decisions (Baker & Martin 2011).

Nevertheless, NPV requires accuracy in determining actual cash flows. If an initial outlay is easy to identify, calculation cash flows for the future period is a complicated task. Under- or overestimation of the cash flows can cause serious deteriorations in the final results, and consequently lead to the wrong investment decisions for a company (Röhrich 2007, 75.). Because all the necessary data about an investment is unlikely to be available, the NPV method and other methods under certainty should be implemented simultaneously with the methods that allow for uncertainty (Götze et al. 2008, 63.).

The NPV method works under assumption that the perfect capital market exists, meaning that loans can be taken and invested at any time at a uniform discount rate without endangering the profitability of an investment and the company's liquidity. However, this perfect capital market does not exist. In the real capital market interest rates are different, making it impossible to establish a uniform discount rate. In some cases, where a discount rate plays a crucial role in assessing the profitability of a project, different methods have to be used (Götze et al. 2008, 64.).

#### **2.4 Internal Rate of Return (IRR) Method**

Internal rate of return method is not as widely used as the NPV method, but is closely similar to it. In fact, the data required to calculate the internal rate of return of a particular project is exactly the same as the one used when calculating the NPV. The difference is how calculations are made and interpreted, as the target measure in this method is not an additional amount generated by an investment, but rather a percentage - the internal rate of return (Götze et al. 2008, 67.).

The internal rate of return signifies the rate, at which the NPV of a project equals zero. When calculating IRR, it is important to remember that, as in case with NPV, the uniform discount rate is applied. IRR shows the interest earned on the capital employed at specific points of time. When a choice between two or more investment projects is made, a project



with a higher IRR is preferable. When a single project is assessed, its IRR is compared to a certain uniform discount rate often established by the company (Götze et al. 2008, 67-68.).

As stated above, the internal rate of return shows at what rate the NPV becomes zero.

$$NPV = 0$$
$$NPV = -C_0 + \frac{C_1}{(1+i)^1} + \dots + \frac{C_n}{(1+i)^n}$$
$$0 = -C_0 + \frac{C_1}{(1+i)^1} + \dots + \frac{C_n}{(1+i)^n}$$

By solving the equation above, the IRR can be determined. However, it is only possible to accurately calculate the IRR for the projects with economic life not more than two periods. For long-term projects the IRR can only be approximated. There are two main methods to approximate the internal rate of return (Röhrich 2007, 80-81; Götze et al. 2008, 71.).

- Graphical approximation
- Arithmetical approximation (or Interpolation method).

Fortunately, with the help of computers it is now possible to calculate the IRR fast and accurately. For these purposes Excel spreadsheet is a tool commonly used by many companies.

Although the NPV and the IRR methods are similar, in some case IRR method can be more advantageous in interpreting the results. Because the IRR can represent the interest earned on the capital employed, it is very visual and direct that makes it quite popular among companies (Götze et al. 2008, 75.).

The internal rate of return method can be applied when comparing investment projects of different life spans and initial outlays, which under the NPV method is not possible as it would lead to false results. However, the IRR method assumes that the cash flows from the project are automatically reinvested into a different project that yields the same rate of return. Obviously, this reinvestment assumption is unrealistic, as it is impossible to achieve in practice. Therefore, the NPV method stays superior to the IRR method in most cases (Röhrich 2007, 85-86.).

## 2.5 Dynamic Payback Period Method (DPP)

Dynamic payback period considers time as a target measure of the investment appraisal. The DPP shows the time needed to recover an investment project by the discounted cash inflows from a project. The DPP method cannot be used as a separate appraisal method but rather a supplementary one that helps to determine how risky an investment is (Götze et al. 2008, 44.).

In order to calculate the DPP it is first necessary to determine the NPV of the project at the end of every period. If the NPV remains negative, it means that the project has not recovered itself yet. The NPV becoming zero, or positive for the first time, signifies that the payback period is reached. If the NPV is positive, it means that the payback period is somewhere within this period (Götze et al. 2008, 76.). The determination of the DPP is presented in a table below.

Table 3. Example of the determination of the DPP

Period	Cash flows	Discounted cash flows (7%)	Cumulative NPV
0	-100	-100	-100
1	26	27,8	-72,2
2	42	48,1	-24,1
3	24	29,4	+5,3

From the table 3, it is apparent that the investment project is paid back somewhere in the period 3. In order to figure out the actual payback period the following formula can be applied (Götze et al. 2008, 76.):

$$DPP = t^* + \left| \frac{NPV_{t^*}}{NPV_{t^*} - NPV_{t^*+1}} \right|$$

Where:

$t^*$  = period of the last cumulative NPV.

Following the example in the table 3, the DPP is calculated as follows:

$$DPP = 2 + \frac{24,1}{29,4} = 2,8 \text{ years}$$

Undoubtedly, the investment projects with shorter payback periods are more preferable as they require less time to recover the amount of money paid in the beginning. Thus, they are considered less risky. Most companies often use their own target for an appropriate DPP, but an average DPP is around 3 years in the business practice.

The dynamic payback period method is closely related to the NPV method and therefore uses the same assumptions and limitations. However, the main disadvantage of this method is the fact that it does not take into account cash inflows that occur after the payback period, which is important for projects with long life span (Götze et al. 2008, 76-77.).

## **2.6 Sensitivity Analysis**

Sensitivity analysis is an investment appraisal tool that, unlike the discounting methods described before, considers uncertainty as an important factor that influences investment decisions. The sensitivity analysis investigates how the target values of a project change, if input variables change. For example, how a 10% decrease/increase in sales will influence the NPV? Therefore, there are certain variables, also called uncertain input variables, which can have most impact on the NPV. The goal of the analysis is to determine what they are and how sensitive these variables are, meaning how much their change affect the project's profitability. Depending on the sensitivity of the input variables, a level of riskiness of the project is then assessed (Röhrich 2007, 114; Götze et al. 2008, 274.).

An important concept in the sensitivity analysis is a concept of critical value. Critical value is a break-even point of a certain variable, which causes the NPV just does not become negative. Besides critical values, the sensitivity analysis often looks at best case and worst case outcomes, either by gradually incrementing them, or using minimum, mean and maximum values. Therefore, the sensitivity analysis shows regular scenario that is more probable to happen, optimistic and pessimistic scenarios, as well as, critical values and the percentages of deviation from original value (Röhrich 2007, 117; Götze et al. 2008, 274, 277.).

The sensitivity analysis helps to answer an important for the risk management question – “what can go wrong?” It identifies what variables are most sensitive, allowing the company's executives to see the importance of each separate input variable and decide what areas of an investment project should be closely monitored and controlled (Röhrich 2007, 117.).

The sensitivity analysis is an easy analysis to conduct and interpret, however, it is based on the assumption that input variables change separately, which is, in fact, rarely a case. Contrary, input variables change simultaneously that makes the results more difficult to compute and analyze (Götze et al. 2008, 280.).

## **2.7 Risk Analysis (Monte Carlo Simulation)**

One important limitation, while applying the sensitivity analysis, was the impossibility to change more than one variable at a time. In order to resolve this problem more elaborate appraisal techniques are used for these purposes. One of them is the risk analysis or Monte Carlo simulation. The name derives from the association of roulette wheels used in Monte Carlo casinos. The Monte Carlo simulation allows to create a model, based on which a number of experiments or simulations are conducted. The simulation has as its goal to create a risk profile with a probability distribution of the NPV of a project. This method helps to identify the outcomes that can be achieved under certain circumstances in the market (Röhrich 2007, 118.).

Risk analysis starts with selecting uncertain input variables and estimating the probability distribution of them. The probability distribution is usually forecasted based on the figures from the previous periods, because, as a rule, it is assumed that the future probability distribution should not be different from the past one. However, the process of estimating the probability distribution is problematic and subjective, as most of the times it originates from personal assumptions of individuals or groups (Röhrich 2007, 118; Hargitay&Yu 2005, 38.).

The next step in the analysis is allocating random numbers and carrying out a large number of simulation runs. It is important to have as many runs as possible to ensure that all the probabilities are taken into account. There is a number of computer software available that helps to model and implement necessary simulations. So, after multiple runs are performed, the output variables and their relative frequencies are obtained. Then the final step is to analyze the given results and make a conclusion about the profitability of an investment and its risk level (Röhrich 2007, 118; Götze et al. 2008, 281-282.).

One of the advantages of this method is the fact that it gives more precise overview of risks as it considers many potential influencers and probabilities and compared to sensitivity analysis, allows for dependencies between input variables. This analysis guides an assessment of a project and provides useful risk measures. Nevertheless, the risk analysis is rather expensive and time consuming that makes it worth implementing only when

large investment projects are in question. Moreover, the main challenges of the risk analysis worth mentioning are difficulties in obtaining necessary data and data uncertainty and subjectivity. All of it leads this appraisal method to be highly exposed to errors (Röhrich 2007, 123; Götze et al. 2008, 285-286.).

## **2.8 Decision Tree Analysis**

Scenario planning techniques are widely used in almost every company. They differ in their complexity when it comes to the number of scenarios, planning period, input measures and inclusion of probabilities. The so-called decision tree analysis is chosen for the current research. The decision tree analysis is one of the most time-consuming tools to analyze an investment. At the same time, it is considered to be the most flexible and future-oriented tool in assisting investment decision-making. This method creates multiple potential scenarios that are all alternative to each other. Moreover, the decision tree analysis incorporates the probabilities of each scenario to occur. It helps to thoroughly analyze the scenarios that can happen and see how risky an investment project really is. The decision tree analysis is widely used for appraising large investment projects with a significant initial outlay (Götze et al. 2008, 286, 296.).

A decision tree consists of four fundamental components (Hargitay&Yu 2005, 63; Röhrich 2007, 124.):

- The decision nodes. They provide action alternatives an investor can choose from depending on the situation. Choosing a certain decision node determines the course of actions and subsequent decisions that might be necessary to be made as a result of the initial decision.
- The event nodes. They define external market conditions that can influence the course of actions, like high/low demand, improved/stagnating economy etc. Therefore, the decision tree analysis not only allow to track interdependencies between initial and successive decision, but also the influence of the states of the economy on the decision-making process.
- The probability nodes. They represent the likelihood of a certain outcome to happen. The probabilities vary from zero to one or 100%. Depending on the available information and the market knowledge, the probabilities can be more or less subjective.
- The outcome nodes. They show the results from undertaking certain successive decisions. In order to be able to compare the results of each course of actions common unit of measure should be established. Most commonly-used unit of measure for large investment projects is the NPV. Between two investment projects the one that generates a higher weighted net present value is to be chosen.

Although the four basic types of the nodes are always present in the decision tree analysis, the number of planning periods may differ. Most companies usually have their own target payback period that determines the number of periods in the decision tree analysis.

An alternative way to determine the number of periods is to calculate the dynamic pay-back period (DPP) value (see sub-chapter 2.6).

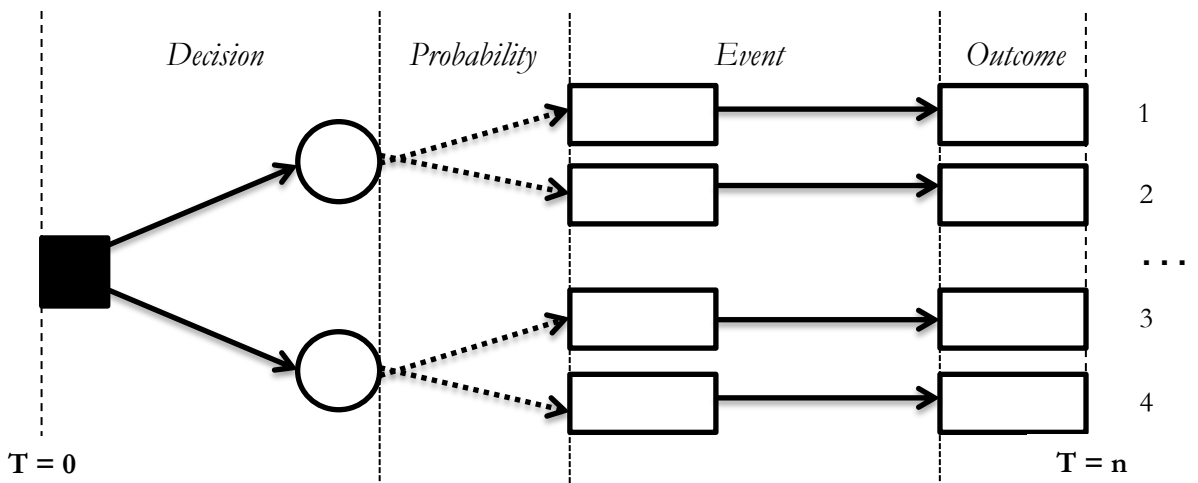


Figure 1. Example of a decision tree

Figure 1 depicts a simple example of a decision tree with only  $n$  planning periods ( $T = n$ ). In this case, there are four possible scenarios with four different outcomes (1-4). It is assumed that two decision options exist, each of which is followed by two events. This pair of events is identical no matter what decision is initially made. Taken into consideration the probability distributions, the final outcomes for each scenario are defined.

Let's assume there are two investment decisions in question – A and B. The projects are expected to pay off in two periods. The initial outlay of the project A is 7 000€, and 10 000€ of the project B. The decision tree for these investments is shown in figure 2.

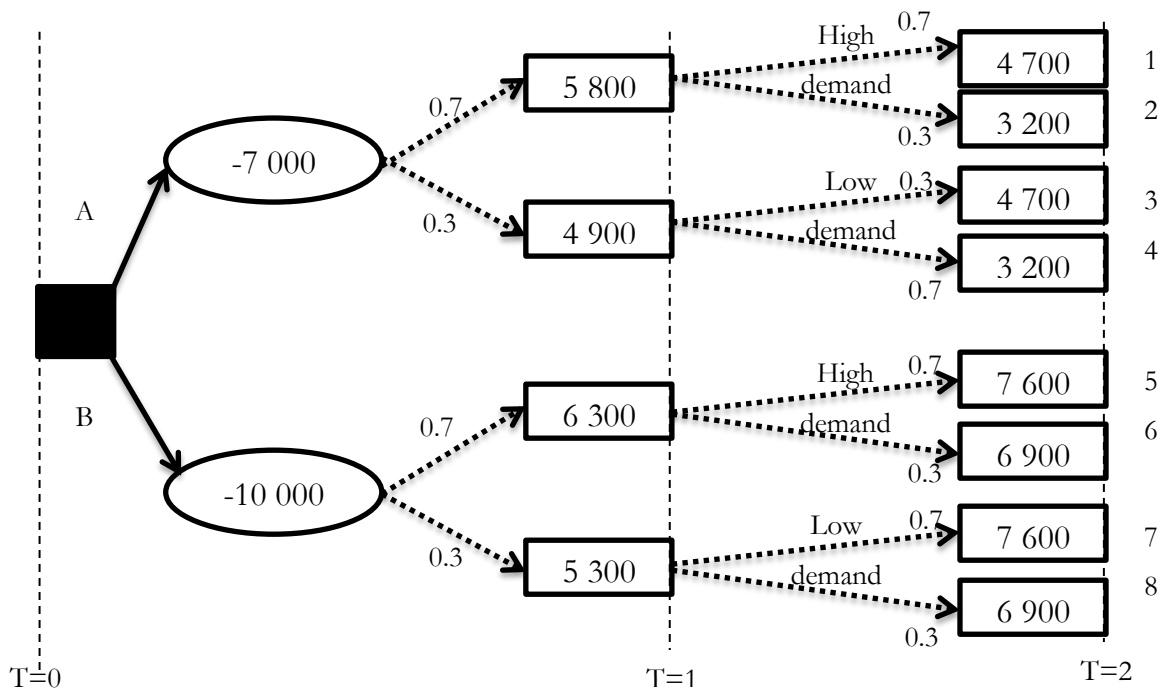


Figure 2. Decision tree for the projects A and B

After the initial decision has been made, there are two probabilities and two values of cash flows at the end of period 1, respectively. Depending on the level of demand in the period 2, cash flows at the end of period 2 are estimated. This decision tree represents four unique scenarios that can occur once the investment decision between implementing either of the projects is made. In order to figure out, which of the project is to be undertaken, expected NPVs of both of the projects need to be computed.

In table 4, the weighted NPV of each scenario is calculated together with the expected NPV of each one of the projects. Based on the expected NPV, a decision about implementing a certain project is made. The project with the highest expected NPV, in this case the project B is more profitable and should be then undertaken.

Table 4. Net present values and weighted net present values of the scenarios 1-8 (investment decisions A and B)

Scenario	NPV	Probability	Weighted NPV
1	3 500	0.49	1 715
2	2 000	0.21	420
3	2 600	0.09	234
4	1 100	0.21	231
<b>Estimated NPV of the project A</b>			<b>2 600</b>
5	3 900	0.49	1 911
6	3 200	0.21	672
7	2 900	0.09	261
8	2 200	0.21	462
<b>Estimated NPV of the project B</b>			<b>3 306</b>

The decision tree analysis can be improved by adding action nodes to it, meaning that depending on a certain decision and event, the company takes an appropriate action, like for example, investing additional money into a project, spending more money on promotion, etc. This kind of decision tree analysis is referred to as flexible planning (Röhrich 2007, 129.).

The decision tree analysis is a future-oriented model that helps to predict the probability of every possible scenario to occur, taking into account interdependencies between initial and subsequent decisions, impact of the external factors, and influence of certain actions additionally undertaken by a company on the decision process (Götze et al. 2008, 296.).

Although the decision tree analysis allows viewing the clear picture of the available decisions and their outcomes, it is rather time-consuming. It is very important to limit the num-

ber of decision alternatives included in the analysis, as too wide range of them can make the decision process complex and impossible to comprehend. While creating a decision tree, a special attention should be paid to the probability estimations and the establishment of the common target measure (Röhrich 2007, 134-135; Götze et al. 2008, 296.).



### 3 Empirical part

Chapter 3 presents the research design and the methods used in this thesis. The research design process starts with defining the research methodology. Based on the goal of the research, qualitative methods are applied. Qualitative research is a solution-driven investigation striving to develop understanding of the problem.

#### 3.1 Research design process

The complete research design process can be depicted schematically in figure 3.

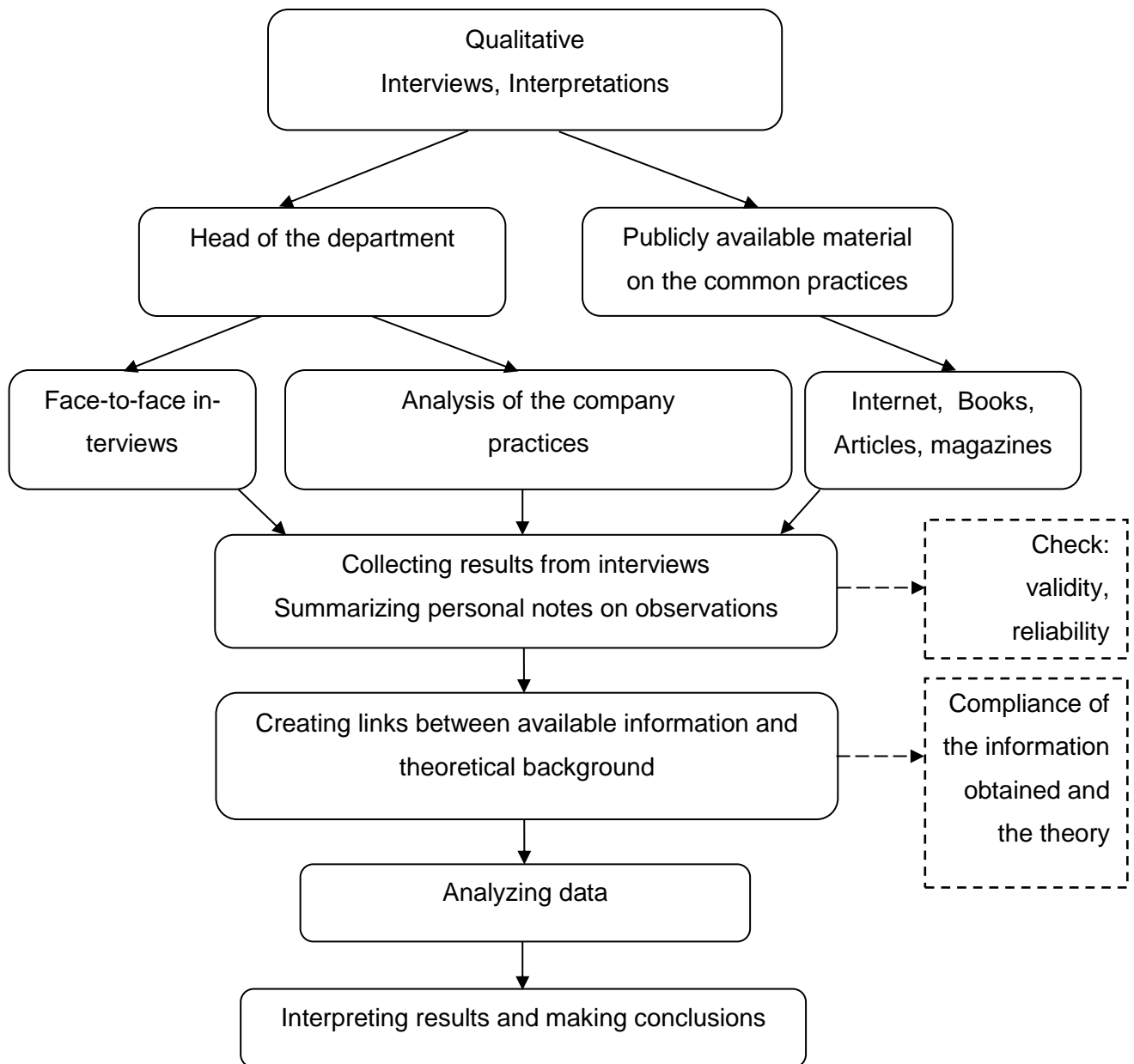


Figure 3. Research design process

Starting with defining the type of the current research, two main means of data collection have been decided on, which are interviews and personal interpretations of the company's practices. This decision influences the data collected and the final result of the research. The choice of interviews and personal interpretations are expected to be the most appropriate data collection methods that will allow gathering as much relevant for this particular research information as necessary.

Later on, the two main sources of the data required were defined. The first one was executives and responsible for the investment decisions in the company. The second source is publicly available materials regarding the topic. Linking these two sources together provides an opportunity to find a solution and create final recommendations for the company. After all the necessary data was collected and summarized, it can finally be analysed by applying theoretical models and methods. The last and one of the most crucial stages of the research process is finalizing the results obtained during analysis and creating the recommendations for the company.

### **3.2 Research methods**

In case of a qualitative research, the most suitable and relevant methods are interviews and personal interpretations. For the purposes of this thesis, two face-to-face interviews with the head of financial control and analytics department were conducted. The first interview was held on 3 July 2014. It had as its goal to obtain general information on the franchise investment projects implemented already and to be implemented in the nearest future, and get familiar with the investment decision process in the company. The interview included eight open questions and was carried out in a form of a dialog. The full list of questions and brief notes of the answers can be found in the Appendices (see appendix 1). Chapter 4 and 5 are based on the answers from the interview 1, where one can find full information, analysed and logically structured.

During the second interview that took place on 22 July 2014 all necessary financial data regarding the investment projects in question was acquired and further discussed. In order to be able to obtain complete financial data a preliminary checklist was formed before the second interview took place (see appendix 2). The financial data will be used to determine the profitability of the investment project by applying the investment appraisal methods.

Based on the results of the both interviews and the financial data provided, personal interpretations were made. Together with the interviews, they are the means to collect necessary data from the case company and develop the investment decision guidance and a

consistent investment strategy. Mainly, the interpretations are rather subjective, as they are made based on the personal judgements regarding the data received through the interviews. Therefore, two risks mentioned in the chapter 1 - difference in perspectives and lack of understanding, have to be carefully observed during this part of the data collection. In order to avoid the above-mentioned risks an additional discussion meeting with the department head is to be arranged. During the meeting any weak spots and misunderstandings can be easily eliminated.

## **4 Existing franchise projects**

This chapter focuses on discussing the matters related to the IQ1 and the IQ2, providing significant information, first of all, on the methods that the case company uses to assess their investments, and secondly - on the most important investment projects already implemented in the case company, thus, allowing to benchmark possibilities for future improvements in the investment appraisal of the company.

The chapter is divided into four parts, each of which introduces one of the investment projects implemented by the company earlier, including one failed project, a relatively new project and two most successful ones in the history of the company. Each part gives general information on the franchise itself, special agreement terms between a franchisor and the company, characteristics of the investment project and the analysis conducted by the company before accepting the project. Later, in chapter 5 the investment appraisal methods are applied in order to give a better understanding of the project' profitability and its risk levels. Necessary calculations are based on the financial data (preliminary forecasts and actual figures) provided by the company.

### **4.1 General issues on franchising in the case company**

The case company sells clothes and accessories of famous brands all over Russia. In order to sell products under these brands the company needs to establish agreements with them – franchise agreements. According to the general definition, a franchise agreement is a legal contract between a franchisor and a franchisee, where the franchisor agrees to provide its products, brand, operational model and guidance to the franchisee in exchange for a fee and an agreed percentage from sales (BusinessDictionary 2014).

Different brands have different franchise terms and requirements. Some franchisors ask for an entrance fee and a certain amount of money to be invested in a franchise, while others do not. There could also be special preconditions to be fulfilled in order to sell a brand in the company's shops, for example, a franchisor may tell a company that the shops can only be located in certain areas, i.e. crowded places, with large windows and certain total area. They may as well allow a company to sell only in a city or a shopping mall that they have chosen themselves. Often companies cannot make independent from franchisors decisions, but must report on every issue related to the brand and communicate all the financial data to the franchisers regularly (usually every month, or even every week). Another example of the dependence of companies from franchisors is the fact the franchisors choose the products to be sold by the companies.

Franchise agreements are very strict and require a company to obey to any rule stated in the agreement. However, these agreements provide companies with an already established brand, reputation, customer base, business support and operation model.

Table 5. Comparative analysis of franchising brands

Franchise	Entrance fee	Min. investment (€)	Franchiser's support	Location requirements	Min. store area (m <sup>2</sup> )
Mango	Yes	415 000	<ul style="list-style-type: none"> <li>-Interior design</li> <li>-Organization of operations</li> <li>-HR</li> <li>-Merchandising and management skills trainings</li> <li>-Personnel supervision</li> <li>-Ready marketing solutions</li> </ul>	City center Shopping mall	220-250
S'Oliver	No	63 000	<ul style="list-style-type: none"> <li>-Location analysis</li> <li>-Preliminary profitability analysis</li> <li>-Design and visual merchandising services</li> <li>-Store management advising</li> <li>-Employees trainings</li> </ul>	Shopping mall Commercial street	70-100
Terranova	Yes	520 000	<ul style="list-style-type: none"> <li>-Support at every stage</li> <li>-Delivery of goods</li> <li>-Handling unsold stock</li> <li>-Exclusive rights in a region</li> </ul>	City center Shopping mall	300-800

There are two ways to acquire a franchise. The first one is to buy it directly from the franchisor. In this case, it is very hard to assess the investment and its risk, as there is no data available, based on which future cash flows and economic life can be forecasted. As a rule, a franchisor provides a company with all the calculations regarding the profitability of an investment. It is tricky, however, to identify the sources of their forecasts and therefore the reliability of the data is questionable. In this kind of situations, the company's executives apply their common sense or try to re-calculate the results, based on their own estimations.

The other possible way is to buy a ready business with a franchise agreement from a third party, which used to own it before. Here, companies can assess an investment based on the results from previous years. Even though, the selling company provides ready-made profitability calculations, it is important to check them thoroughly. It is rare that anybody would sell a profitable business therefore this way of franchise purchase is extremely risky.

Before looking closer at the performance of the franchise store, it is important to clarify a concept of a transformation ratio. The transformation ratio is an indicator of a number of visitors who visited a store and made a purchase. The rate helps to estimate the sales for the future periods. E.g. a number of visitors per month is 10 000 people, and the transformation rate is 12%, meaning that only 12% of all visitors are most likely to buy from the store, i.e. 1 200 people. Then, by applying the transformation ratio (item/person), an actual number of items that are going to be sold can be found. Let's assume that the ratio is 1,39, then  $1,39 \cdot 1\,200 = 1\,668$  items will be sold next months. By multiplying the number of items by the average sales price (e.g. average price is € 25), the sales are estimated:  $1\,668 \cdot 25 = \text{€ } 41\,700$  are the sales of the store per month. The transformation ratio method is one, but not the only, way to forecast future sales commonly used by the retail fashion companies.

Now, let us go back to the case company. As stated before, it is located in the Kaliningrad region where the business structure and franchise terms are substantially different. The company works under the platinum scheme, meaning that it can sell under the brand name, but it does not use any support of the franchiser and it has a right to choose the clothes collections itself. Compared to the traditional franchise agreements, where the products are paid for only after they are sold, the platinum scheme requires the company to pay beforehand and the products are not a subject to the return policy. (Boyko 3 July 2014)

Even though the headquarters are based in the Kaliningrad region, this research will give an overview of investment projects and analyse one of the new projects scheduled soon for the mainland of the Russian Federation, where regular franchise agreements are used.

## **4.2 Sinéquanone**

Sinéquanone is a French clothing brand founded in 1973 in Paris (France). Nowadays, Sinéquanone has 158 stores in 39 countries. The brand positions itself as the Parisian chic garments, specially designed for elegant modern women willing to express their femininity and individuality (Sinequanone 2014). Sinéquanone offers quality women's clothes at a rather high unit price (average price for an item is 80€).

As a franchise, Sinéquanone has been in the market for a long time already. However, the case company bought the franchise only 3 years ago, having previously worked with the brand through the platinum scheme in Kaliningrad. Expecting similar demand outside the

Kaliningrad region, the executives made a decision to buy the franchise rights of the brand from a third party who already had 14 working stores in 7 Russian cities.

For the three operating years (2011-2013) the franchise caused the company to lose around 2 500 000€ in profits. This project is now considered the worst investment decision ever made by the company. In order to get to the roots of the problem, let us start from the very beginning, when the investment decision was only about to be made.

The initial outlay of this project was 3 750 000€, whereas 3 125 000€, or 83% of the total amount, was financed with debt. As a rule, for the project to be successful 30% of the initial outlay of any project has to be financed with the company's own resources. Anything less than 30% is not enough and can harm the liquidity of the company (Boyko 3 July 2014). The case company ended up paying off large amounts of interest every period together with other costs.

Table 6. General information on the Sinéquanone project

<b>Duration of the project (month)</b>	<b>Initial outlay (k €)</b>	<b>Number of open stores</b>	<b>Number of cities</b>	<b>Average price for an item (€)</b>	<b>Transformation ratio (%)</b>	<b>Transformation ratio (item/person)</b>
36	3 750	14	7	23-38	6.7	1.37

Nevertheless, it was not the only challenge that the company had with the project. The company that was selling their franchise rights provided the financial data, which showed the declining sales compared to the last year. Despite this red flag, the executives decided to proceed with the purchase without conducting the market analysis, which may have proved that the brand was losing their customers. The reasons for it could be fiercer than before competition, changes in the clothes collections and brand switch from the Parisian chic look to more casual garments. The external analysis would have warned the executives of the existing market trends and possibly discouraged them from the investment.

After three years the executives realized all the impact this project had on the whole company that has been working to pay for the unprofitable Sinéquanone stores. The investigation opened up new reasons for the losses. First of all, the franchise offers the goods at the initially high price (23-27€ for an item of summer collection and 31-38€ for an item of winter collection). Adding up other costs, like personnel bonuses, bank service fee, transportation, led the variable costs to represent about 70% of the total costs. The percentage is very high, as it is estimated that the permissible percentage cannot be more than 68% of the total costs. (Boyko 3 July 2014)

Table 7. Performance results of Sinéquanone (first half of 2014)

<b>Planned sales (€)</b>	<b>Actual sales (€)</b>	<b>Δ % Sales (compared to 1<sup>st</sup> half 2013)</b>	<b>Plan fulfillment (%)</b>
417 400	407 799	-3	97.7

Before getting deeper into the reasons for the Sinéquanone's failure, two very important terms are to be introduced here – markup and gross margin percentage. These two terms are often confused and misused in accounting. Nevertheless, it is crucial to understand the difference between them. While gross margin percentage is a difference between selling price and profit, markup is a difference between selling price and unit costs. For example, there is a product, which costs 5€ to produce, whereas, the markup is agreed on to be 100% of the product costs, which is 5€. Then, the selling price of this product is 10€. By subtracting the product costs from the selling price the gross margin is calculated, which is 5€. 5€ out of 10€ gives only 50%, meaning that 100% markup equals only 50% gross margin.

Sinéquanone is known for the high initial markups of 3,8 or 380% (winter) and 2,8 or 280% (summer). These markups were necessary to cover all the expenses of the stores. Here another problem lies. Because the stores made losses, by the time the company had to pay for the new collections, there was not enough money left. It caused the orders to be placed later and therefore the deliveries were made 3-4 months later than expected. The new collections started to be displayed in the end of the season, at the time when other stores were about to offer seasonal sales. Obviously, Sinéquanone stores were forced to offer sales as well. As a result, they were able to sell new collections at high markups for only a few weeks, and then sell them at a low markup of 1.7, which was not enough to pay for the expenses. Every year it added up and aggravated the situation.

Nonetheless, there was one more reason for the project to fail and this time it was not related to the market situations and the liquidity problems. The company faced personnel problems and stores' mismanagement. The franchise rights were bought as a working business, with operating stores, own managers and salespeople. The company expected to have well-trained employees who already had enough experience selling the brand. The old managers were fully trusted to do their jobs, which turned out to be a bad idea. The personnel used the opportunity to raise their salaries and bonuses (even though sales decreased, bonuses increased). When the company started to investigate the matter, they realized that the personnel worked more hours that the stores were actually open. After multiple arguments with the managers, the company cut the salaries to the normal levels and started to monitor the stores' financial performance. Moreover, an em-



ployee who worked for the company already was assigned to be one of the managers of the Sinéquanone stores.

The personnel risk existed from the very beginning, the company recognizes that it should have paid more attention to creating bonds with new employees and building the company loyalty. Another solution would be to hire or assign a new manager, who would control and monitor the brand' performance.

The purchase of the Sinéquanone rights is considered to be the worst investment decision made by the company. The causes lay in the company's negligence and lack of resources, both financial and labour. Selling the brand's rights was discussed, however, liquidation expenses seem to be rather high. Therefore, keeping the unprofitable stores is estimated to cost less in the short run, than getting rid of them immediately.

### **4.3 Mango**

Mango is a famous Spanish clothing brand, which started its international franchising policy in 1992 by opening two new shops in Portugal and later in France. Nowadays, international sales are much higher than national, as Mango has around 2060 stores in 104 countries (Frankon 2014a).

The Mango franchise aims at displaying collections in an ambiance that reflects the spirit of its customers. The interior is designed to make the shopping experience as smooth and pleasant as possible. Mango strives to create same atmosphere and excellent service in its stores all over the world. Mango has three lines of stores, they are – MANGO, H.E. and MANGO TOUCH (Frankon 2014a).

As stated in the franchise agreement, Mango offers training and support from its part. First of all, a team of Mango specialists helps to get a store ready for the opening by designing the interior, organizing store's operations, hire skilled employees. Furthermore, they hold regular trainings related to merchandising and management skills, supervise personnel in order to ensure high sales. Mango also offers ready marketing solutions, from street banners to window dressing (Frankon 2014a).

A franchisee in his turn agrees to fulfill certain prerequisites and obligations. Firstly, the minimum initial outlay cannot be less than 415 000€. Total selling area of a store should be 220-250 square meters, with a storage space of 30% of the selling area. Stores are to be located in crowded places in the city center or a shopping mall. Another prerequisite is

that any Mango store should have large windows facing main avenues or crowded shopping passages (Frankon 2014a).

Table 8. General information on the MANGO project

Duration of the project (month)	Initial outlay (k €)	Number of open stores	Number of cities	Average price for an item (€)	Transformation ratio (%)	Transformation ratio (item/person)
156	from 415	13	8	25-30	11	1.36

The purchase of the Mango rights is one of the most successful and long-lasting projects of the case company. It has been operating for 13 years bringing steadily high profits. The franchisor provides all necessary information and marketing materials. Moreover, Mango has a unique franchise policy, allowing the company to return all unsold stocks at the end of the season back to the franchisor without any additional costs. The drawback that the company encountered is the fact that every year it obliges to buy marketing or decorative materials from Mango on a certain sum. One year the company paid 400 euros for two plain bins. These expenses are stipulated in the franchise agreement and are easy to forecast. (Boyko 3 July 2014)

Table 9. Performance results of MANGO (first half of 2014)

Planned sales (€)	Actual sales (€)	Δ % Sales (compared to 1 <sup>st</sup> half 2013)	Plan fulfillment (%)
1 112 400	902 156	-0.28	81.1

Unlike Sinéquanone, the Mango franchise rights were bought directly from the franchisor, making it difficult to estimate future cash flows. Therefore, the cash flows were determined, based not on the data from the previous years, but rather on the forecasts built by the franchisor himself. These forecasts were carefully examined in the company before making the final decision.

#### 4.4 S'Oliver

S'Oliver is a large fashion supplier in Europe. Originated in Würzburg (Germany), S'Oliver became one of the main companies in the fashion industry in Europe having more than 2500 stores all over Europe. The brand offers a wide variety of clothes for women, men and children, issuing 12 new collections every year. S'Oliver is a market leader in Germany – the market characterized by tough competition and a demand for high-quality goods (Frankon 2014b).

As a franchisor, S'Oliver offers location analysis and preliminary profitability analysis. It also helps with determining the most appropriate range of goods for each store separately, and provides design and visual merchandising services in order to attract, engage, and motivate customers to buy S'Oliver clothes. The franchisor gives advices in store management and provides necessary training for employees (Frankon 2014b).

As a requirement, a franchisee is to find a location for a store either in a shopping mall or a separate building in a commercial street. The store should be 100 square meters or more for women's and men's stores and 70 square meters for children's stores. The height of a store should be 3 meters inside, the store entrance has to be located on the ground level, without any steps. The required initial outlay starts from 63 000 euros, with 1,5 years of estimated payback period (Frankon 2014b).

S'Oliver is a relatively new for the case company investment project. Since the purchase of the S'Oliver's franchise rights 7 months ago, three stores were opened in Ulyanovsk and Ivanovo. An average price of an item is around 65-70 euros, with the markup coming to 100% of the unit costs.

Table 10. General information on the S'Oliver project

<b>Duration of the project (month)</b>	<b>Initial outlay (k €)</b>	<b>Number of open stores</b>	<b>Number of cities</b>	<b>Average price for an item (€)</b>	<b>Transformation ratio (%)</b>	<b>Transformation ratio (item/person)</b>
7	-	3	2	65-70	-	-

The franchisor required the case company to open the stores in Ulyanovsk and Ivanovo. Being the only open offer, the company agreed to start operations there. However, as it is seen from the latest financial results, the stores are not generating enough profits. The problem is that the demand in these cities differs from the offer of goods that the brand can provide. The customers in Ulyanovsk and Ivanovo prefer cheaper clothes made of simple bright fabrics, whereas S'Oliver is an expensive brand of high-quality casual clothes. Reserved and stable brand as S'Oliver simply cannot satisfy the needs of the customers in these cities. The mistake of accepting this investment project lies in poor analysis of the customers and their preferences. While the demand for clothes exists, S'Oliver is not the right brand to be sold there.

Nevertheless, the decision was made to proceed with the project further in order to partially cover the expenses, but try to change the locations of the stores within the cities and

develop a new marketing strategy. The company's suggestion to relocate the stores to different cities was rejected by the franchisor.

#### 4.5 Terranova

Established in 1961, an Italian clothing brand has numerous admirers and followers in 35 countries all over the world. Terranova offers a wide variety of clothes for more than an adequate price. The Terranova collections are designed for young trendy people who value colorful clothes, wide variety of fashion styles and regular collection renewals (Frankon 2014c).

In contrast to other franchises, Terranova has a number of valuable advantages, like the franchisor's support at every stage, from store opening to personnel training. Terranova is also responsible for delivery of the goods to the stores and handling unsold stock in the end of the season. When a company decides to purchase the franchise rights, it gets exclusive rights to sell the Terranova clothes in the region, signifying that nobody else is allowed to distribute the brand's clothes in this region (Frankon 2014c).

Terranova works according the European franchise model, meaning that the delivery of the goods is only possible when letter of credit from a trusted bank is issued to the franchisor. It works as a guarantee that the bank will pay for the goods in case anything happens to the company. As with all the rest of franchises, Terranova requires the store to be based in prime locations, either in shopping malls or in city centers. The total selling area can vary from 300 to 800 square meters. Minimum initial outlay required is 520 000 euros, plus the company agrees to invest 380-400 euros per square meter in lightning objects made in Italy. The expected payback period is 2,5 years (Frankon 2014c).

Table 11. General information on the Terranova project

Duration of the project (month)	Initial outlay (k €)	Number of open stores	Number of cities	Average price for an item (€)	Transformation ratio (%)	Transformation ratio (item/person)
84	from 520	9	7	10-14	14.8	1.93

Together with Mango, Terranova is a generally successful for the case company investment project lasting for 7 years so far. It has a large customer base and brings stable margins. The transformation coefficient of the people who bought something out of all people who entered the store is 14.8%, which is a rather high indicator for big low priced

brands. The case company owns 9 stores in 7 Russian cities (see figure 4). (Boyko 3 July 2014)



Figure 4. Location of the company-owned Terranova stores in Russia

The Terranova stores owned by the case company have been generating stable returns and showing very high sales levels during the last 7 years of operations. As demonstrated in table 11, the results from the first half of the year 2014 indicate a slight decrease in sales throughout the whole chain of the Terranova stores. The reasons for the decrease in sales lay both in the external and internal factors, influencing the brand's financial performance. It can be partly explained by the difficult situation in the fashion market, as well as opening of a new Terranova outlet, which turned out to be poorly thought-out decision. However, the case company is not concerned about the performance of the whole chain of the stores, but rather about the performance of the recently opened outlet.

Table 12. Performance results of Terranova (first half of 2014)

Planned sales (€)	Actual sales (€)	Δ % Sales (compared to 1 <sup>st</sup> half 2013)	Plan fulfillment (%)
1 571 500	1 337 346	-12	85.1

The performance of this particular outlet attracted special attention of the executives of the case company. The company has already lost hundreds of thousands of euros investing in this project. Now it is seeking for alternative solutions to improve the situation and start receiving profits from the investment. Therefore, the Terranova outlet is the main focus of

the research, as based on this investment project, the complete investment guidelines for the company can be developed. The Terranova outlet investment project will be discussed in detail in Chapter 5.

## 5 Case investment project

Chapter 4 gave an overview of some of the existing in the case company investment projects, as well as briefly introduced the case investment project that will be further discussed and analyzed in Chapter 5. The chapter is dedicated to the IQ3. The objective of this chapter is to provide investment appraisal of the project in question by applying the methods discussed in Chapter 2.

### 5.1 Basic information

The Terranova outlet was opened in 2013 in Samara, a city located in the Southeast of Russia. For the first operating year the store made huge losses. Actual sales did not even reach the breakeven point. Throughout the whole operating period, a number of customers who visited this outlet was surprisingly low, which is very unusual for this chain of stores. Table 13 shows the financial performance of the Terranova outlet in Samara, in comparison with some of the other Terranova stores owned by the company.

Table 13. Planned and actual sales of the Terranova Samara in August 2014, compared to the sales of other Terranova stores in August 2014

	<b>Breakeven point (€)</b>	<b>Planned sales (€)</b>	<b>Actual sales (€)</b>	<b>Completion of the plan (%)</b>
<b>Terranova Samara</b>	<b>69 438</b>	<b>57 000</b>	<b>39 266</b>	<b>68,7</b>
Terranova Novgorod	118 801	163 000	129 298	79,3
Terranova Saratov	144 543	188 000	148 829	79,2
Terranova St.Petersburg	400 527	465 000	425 815	91,6
Terranova Ufa	97 489	153 000	124 892	81,6
Terranova Kaliningrad	105 916	200 000	169 887	85,0

As seen in table 13, the outlet in Samara has not reached its breakeven point by more than €20 000 in August, whereas other stores generated surplus. Previous months show similar results. The reason for such a poor performance was explained during the first interview (see appendix 1).

The main cause is an unreasoned location decision. It led to a number of factors that, in their turn, determined a failure of this project. Before anything else, it is necessary to mention that the Terranova outlet was located in a shopping mall, where mainly expensive luxury brands were sold. Moreover, the location of the mall was far from the city center, accessible only by car or taxi. Therefore, it can be concluded that insufficient customer research was conducted.

Designed primarily for teenagers and young people, the low-cost Terranova clothes did not find its customers in the shopping mall among luxurious clothing brands. The customer segment that visits the mall does not usually buy the Terranova products. To make things worse, Terranova loyal customers did not have access to the shopping mall and purchase clothes from more conveniently located stores.

Based on the customer and location analyses and the figures from the previous 12 operating months, the company decided to close the outlet in the beginning of September 2014. However, as a large market, Samara offers growth opportunities for the company and the access to an extensive customer segment. Therefore, the company's executives were discussing various possibilities of continuing their operations in Samara.

A decision was recently made to relocate the outlet to a more appropriate place, where its full selling capacity can be used. After analyzing different potential locations, a shopping mall, simply called City Mall, nearby the center was chosen (further in the research this investment project will appear under the name – the City Mall project). The main advantages are its convenient location, high total number of visitors per day, comparable clothing brands that are sold in the mall and a good access to the primary customer segment of the Terranova brand.

## **5.2 Classification**

To begin with, the investment project needs to be classified in certain categories, as these categories will define the most suitable investment appraisal methods to be applied. For this purpose the classification developed by Götze, Northcott & Schuster (2008, 3-6.) is used (see appendix 3). According to the background information on the project, it can be concluded that the investment in a franchise is an investment in intangible assets. Even though the company will invest money into facilities and inventories as well, it is only possible as a result of a franchise purchase. The franchise purchase in this case is regarded as the primary reason of the investment, whereas, facility and inventory costs are seen as the supplementary expenses.

The City Mall project is not entirely a brand-new investment, but rather a supplementary change investment caused by the unsatisfactory results from the first operating year. The investment per se remains the same. However, it requires additional cash flows and minor changes. These changes involve a physical relocation of the outlet to the new premises. Even though the project is being thoroughly analyzed, it contains some level of riskiness and therefore is regarded as an uncertain investment project.



The investment project is aimed at generating high profits through increased sales. Therefore, the sales are the driving factor that the investment focuses on. The sales are easily calculated, which makes the investment project quantifiable. All the outcomes from the project will be estimated in euros in this research, and there are no other qualitative outcomes or rewards attributable to the investment.

### **5.3 Appraisal**

In order to make reasonable conclusions on accepting or rejecting the City Mall project the investment appraisal methods (see chapter 2) should be applied. The results obtained during the appraisal will give a better understanding on strong and weak sides of the project, its potential benefits and a level of risk involved.

First of all, let us calculate the net present value of the investment project. The initial outlay of the City Mall project is known and divided into two components – investment required and franchise entrance fee, they are € 315 255 and € 30 000, respectively. Therefore, the total initial outlay is € 345 255. Moreover, the economic life is determined by the company to be 5 years with 10% rate of return on the investment. The rate of return is determined by the equity and liability costs and a premium rate that the company expects to receive from the investment project in 5 years. Furthermore, appendix 4 provides the information necessary for the calculations of the cash flows that the project is likely to generate each year for the next 5 operating years.

The cash flows of a period can be calculated in two different ways. The first way is to determine both the cash inflows and the cash outflows of a period and subtract one from the other (see table 14). The cash flows usually come from total sales of the period, however, it is important to remember that the cash flows can also arrive from other activities than sales, e.g. rewards, governmental grants, etc. The cash flows are all expensive attributable to the business, except for depreciation that does not involve any actual monetary outflows. The second way to determine cash flow of the period is easier and faster. According to this method, one only needs to add net profit of the period and the depreciation to get the cash flows (see table 15).

Table 14. Calculations of the cash flows of the City Mall project (1)

	Cash inflow (€)	Cash outflow (€)	Cash flow (€)
End of year 1	1 207 800	1 116 023	<b>91 777</b>
End of year 2	1 328 580	1 235 236	<b>93 344</b>
End of year 3	1 461 438	1 370 106	<b>91 332</b>
End of year 4	1 607 582	1 509 194	<b>98 388</b>
End of year 5	1 768 340	1 663 344	<b>104 996</b>

Table 15. Calculations of the cash flows of the City Mall project (2)

	Year 1	Year 2	Year 3	Year 4	Year 5
Net Profit	22 726,31	24 293,04	22 280,80	29 337,61	35 945,43
Depreciation of the investment	63 050,85	63 050,85	63 050,85	63 050,85	63 050,85
Depreciation of the entrance fee	6 000	6 000	6 000	6 000	6 000
Total depreciation	69 050,85	69 050,85	69 050,85	69 050,85	69 050,85
<b>Cash flow</b>	<b>91 777</b>	<b>93 344</b>	<b>91 332</b>	<b>98 388</b>	<b>104 996</b>

Now all the information for the NPV calculation is available. The NPV formula (see chapter 2.4) is to be applied as follows:

$$\begin{aligned}
 NPV &= -345\,255 + \frac{91\,777}{(1+0.1)^1} + \frac{93\,344}{(1+0.1)^2} + \frac{91\,332}{(1+0.1)^3} + \frac{98\,388}{(1+0.1)^4} + \frac{104\,996}{(1+0.1)^5} \\
 &= -345\,255 + 83\,434 + 77\,144 + 68\,619 + 67\,200 + 65\,194 \\
 &= 16\,337
 \end{aligned}$$

Note that the investment and the entrance fee are fully depreciated by the end of the year 5, with the liquidation value equals zero. Therefore, no separate calculation of the NPV of the liquidation value of the project is needed.

The entire calculations of the NPV of this particular project can be also presented with the help of table 16 and schematically in figure 4.

Table 16. Calculations of the NPV of the City Mall project

Year	PVF %	Cash inflow (€)	Cash outflow (€)	Cash flow (€)	PV of cash flow (€)
1	0,909	1 207 800	1 116 023	91 777	83 434
2	0,826	1 328 580	1 235 236	93 344	77 144
3	0,751	1 461 438	1 370 106	91 332	68 619
4	0,683	1 607 582	1 509 194	98 388	67 200
5	0,621	1 768 340	1 663 344	104 996	65 194
<b>Total:</b>					<b>361 591</b>
- PV of initial outlay					345 255
<b>= NPV</b>					<b>16 337</b>

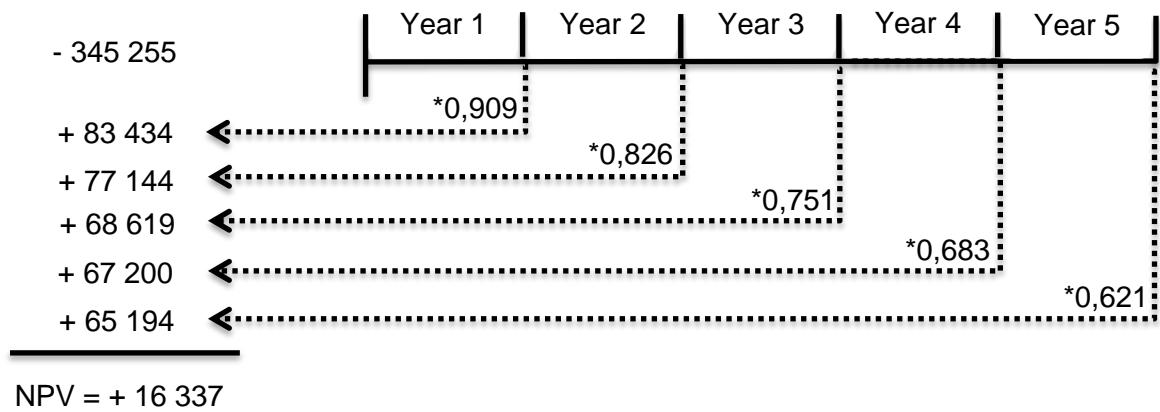


Figure 5. Timeline of the NPV of the City Mall project

Thus, the NPV of the City Mall project is € 16 337, which means that the project would generate enough cash flow to cover the interest, repay the loans and leave an extra cash flow of € 16 337 that can be used by the company in their operational and investment activities.

The exact rate that the company can get from this investment opportunity is calculated with the help of the IRR method. The IRR shows the interest the company earns on the capital invested in the project. As mentioned in chapter 2, there are two ways of approximation of the IRR. However, in order to generate the most accurate figures financial calculators and Excel spreadsheet are generally used. The NPV formula serves as a ground rule for these tools. In case of the City Mall Project, the formula can be presented as follows:

$$NPV = 0$$

$$0 = -345\,255 + \frac{91\,777}{(1 + 0.1)^1} + \frac{93\,344}{(1 + 0.1)^2} + \frac{91\,332}{(1 + 0.1)^3} + \frac{98\,388}{(1 + 0.1)^4} + \frac{104\,996}{(1 + 0.1)^5}$$

Using Excel spreadsheet, let us calculate the IRR of the project. For this purpose the information on the initial outlay and yearly cash flows from table 16 can be used. The discount rate for the project remains 10%. The Excel formula IRR(values;[guess]) gives a result of 11,8% (see figure 5).

Discount rate	10%				
<b>Cash flows of the project</b>					
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
-345 255	91 777	93 344	91 332	98 388	104 996
IRR	=IRR(G6:L6;0,12)		= 11,8%		

Figure 6. Determining the IRR of the project using Excel spreadsheet.

As the single project is assessed, the IRR cannot be compared to any alternative projects. In this case, the IRR should be compared to the uniform discount rate specified by the company, which equals 10%. Once the project generates 10% or higher rate of return, it is generally accepted. Therefore, the City Mall should be considered for implementation, as it generates 2% more return of what the company expects to receive.

Now, as the NPV and the IRR of the project are established, it is time to determine the dynamic payback period, or a period required for the project to fully recover the investment expenses, in other words, to break even. Using the template of table 3 and the DPP formula, the DPP of the City Mall project is calculated as follows:

Table 17. Determination of the DPP of the City Mall project

Period	Cash flows	Discounted cash flows (10%)	Cumulative NPV
<b>0</b>	-345 255	-345 255	-345 255
<b>1</b>	91 777	83 434	-261 281
<b>2</b>	93 344	77 144	-184 677
<b>3</b>	91 332	68 619	-116 058
<b>4</b>	98 388	67 200	-48 858
<b>5</b>	104 996	65 194	<b>+16 336</b>

From table 17, it can be estimated that the investment project is paid back somewhere in the period 5. Let us use the DPP formula to get an accurate result:

$$DPP = 4 + \left| \frac{-48\,858}{-48\,858 - 16\,336} \right| = 4,75 \text{ years}$$

The DPP of the project is 4 years and 9 months. It does not exceed the projected economic life of 5 years, even though it is very close to it. Thus, the project should be accepted. It is important to remember that the DPP method is not used as a separate investment

appraisal technique. It serves a supplementary, advising role in the investment appraisal together with other methods.

Until now the risks attributable to the investment project have not been considered. The sensitivity analysis is an appropriate technique to be applied in order to estimate the level of riskiness of the investment and possibilities of something to go wrong. The previously calculated NPV and cash flows of the project serve the basis for running the sensitivity analysis. The objective of the analysis is to identify variables that have the biggest effect on the profitability of the project, or in other words, on its NPV. Any change in these variables should then be thoroughly controlled and monitored.

Let's assume that there are three main scenarios for the City Mall project – the most probable scenario ("0"), figures for which have already been estimated (see appendix 4); the best case scenario ("+"), under which the sales will raise by 10% annually; and the worst case scenario ("-") that assumes that the sales will drop by 10% annually for the next 5 operating years. Table 18 provides an outlook on the results of all the 3 possible scenarios.

Table 18. Data for the three scenarios within the sensitivity analysis

		Year 1	Year 2	Year 3	Year 4	Year 5
<b>+</b>	Net Sales	1 125 915	1 362 357	1 648 453	1 994 628	2 413 499
	Cash flow	121 752	141 332	166 983	209 422	257 839
	PV of cash flow	110 684	116 803	236 140	259 842	396 238
					<b>PV</b>	<b>656 080</b>
					<b>NPV</b>	<b>310 825</b>
<b>0</b>	Net Sales	1 023 559	1 125 915	1 238 507	1 362 357	1 498 593
	Cash flow	91 777	93 344	91 332	98 388	104 996
	PV of cash flow	83 434	77 144	68 619	67 200	65 194
					<b>PV</b>	<b>361 591</b>
					<b>NPV</b>	<b>16 337</b>
<b>-</b>	Net Sales	921 203	911 991	902 871	893 843	884 904
	Cash flow	59 158	26 960	19 956	3 599	-13 182
	PV of cash flow	53 780	22 281	14 994	2 458	-8 186
					<b>PV</b>	<b>85 327</b>
					<b>NPV</b>	<b>-259 927</b>

The figures show that a change of 10% can dramatically influence the profitability of the investment. A decrease in sales by 10% every year will cause the project to be unprofitable and shall be then refused. In fact, even the slightest change in sales in any of the

years will make the project not worth investing in. However, the rise in sales may greatly increase the return on the investment. To sum it up, the sensitivity analysis indicated high level of risk of the City Mall project and reminded of the importance of precise sales planning, and their careful monitoring in each period.

The last appraisal method to be applied is the decision tree analysis. It allows implementing versatile research on the profitability of the project, taking into consideration the probabilities of various scenarios to occur and risks related to the project. As for the case investment project, it has two main scenarios in the first period. First of all, there is a most probable scenario, when the demand is high and the sales reach the budgeted number (see appendix 4). There is also a 10%-probability of a low demand, which decreases the sales for the first period.

The complete decision tree for the Terranova City Mall project is presented in Appendix 5. The decision tree provides for flexible planning, which means that, according to the market conditions, such as level of demand, the company should react differently. In this case, if the demand in a period is low and the sales drop by 10%, then the company needs to invest additional 1,5% of sales of this period in advertising. The reason for it is the fact that low demand is perceived by the company as a sign of poor promotion and additional money should be invested in it. The percentage of additional money is determined by the case company. The extra advertising costs are reported in the following period.

If low demand occurs in a period and additional advertising is carried out, it is then expected that there is a probability of 90% that the sales of the following period will increase by 10%. However, there is still a 10%-probability that the increased advertising expenses will not have a considerably positive impact on the sales and they will still decrease, but only by 5%. Figure 6 demonstrates a fragment of a decision tree for the project in question, when the demand is high in the first period.

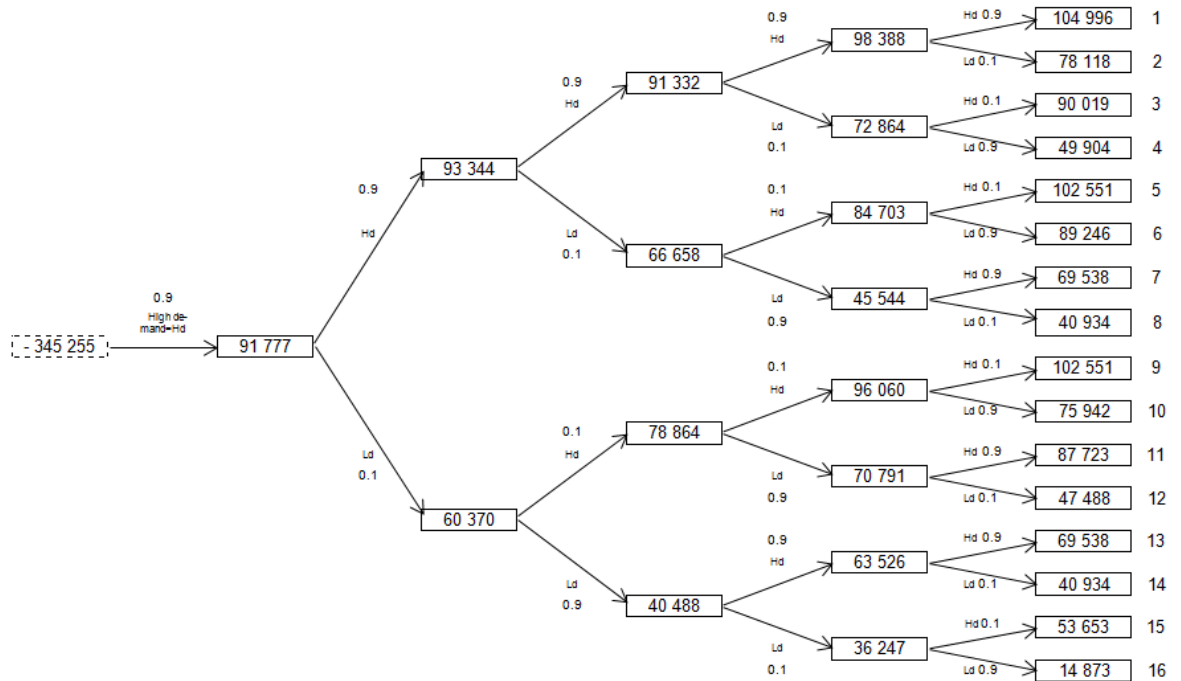


Figure 7. Fragment of the decision tree for the Terranova City Mall project

As shown in figure 7, the company should accept the project at T=1 after a positive scenario, when the demand is high. However, in case of an unfavorable scenario in T=1, it is better for the company to reject the project. As a matter of fact, the investment project should be dropped once the sales decrease by 10% for the first time in any of the periods.

Considering the results in Appendix 6, it can be seen that the project does not tolerate even the slightest decrease in sales in any of the periods. It is a risky project, thus, before accepting it, the executives should make budgets once again taking into consideration all the factors that may influence the levels of sales in the future periods.

## 6 Conclusions

The closing chapter 6 introduces the main findings of the research and establishes the guidelines for the investment strategy developed specifically for the case company. Therefore, the chapter investigates the remaining fourth investigative question dedicated to finding ways to avoid past failures and develop a successful investment strategy of Trade House “Europa”. Additionally, the chapter discusses the research process, important research limitations and suggestions for further studies on the topic of investment appraisal and strategy.

### 6.1 Key results

Based on the investment appraisal portrayed in chapter 5.3, the key results have been received. They are introduced in the form of two tables, which describe the outcomes of each of the investment appraisal methods applied for the analysis, together with interpretations and relevant comments.

Table 19. Key results on the profitability of the Terranova City Mall project (regardless uncertainty)

Appraisal method	Estimated value	Min. target value	Interpretations	Comments
1. NPV	€ 16 337	€ 0	The project will generate enough cash flow to cover the interest, repay loans and leave an extra monetary gain of € 16 337	The discount rate is determined by the interest paid on the borrowed capital and the cost of equity.
2. IRR	11,8%	10%	Additional percentage generated by the investment is 11,8%. Compared to the uniform discount rate of 10%, the project generates 2% higher rate of return than the company expected and should be accepted.	The internal rate of return signifies the rate, at which the NPV of a project equals zero. The uniform discount rate is established by the company.
3. DPP	4,75 yrs	5 yrs	The DPP shows that 4 years and 9 months are needed to recover the investment project by the discounted cash inflows from a project. The DPP of the project does not exceed the projected economic life of 5 years.	DPP method is a supplementary investment appraisal technique, serving an advising role. The main concern when using the method for long lifespan projects is the fact that it does not take into account the cash inflows that occur after the payback period.



Uncertainty is as an important factor to consider when making large investment decisions. The key results of the sensitivity analysis and the decision tree analysis help to investigate the level and nature of risks attributable to the case project (see table 20).

Table 20. Key results on the profitability of the Terranova City Mall project (under uncertainty)

Appraisal method	Estimated value	Min. target value	Interpretations	Comments
4. Sensitivity analysis	€ 310 825 € 16 337 € -259 927	€ 0	There are three main scenarios for the City Mall project – the most probable scenario, the best case scenario (sales + 10%) and the worst case scenario (sales - 10%). The change of 10% greatly influences the profitability of the investment. Even the slightest change in sales in any of the years will make the project not worth investing in. The figures indicate high level of risk of the City Mall project.	The goal of the analysis is to determine the variables with the most impact on the NPV. Depending on the sensitivity of the input variables, a level of riskiness of the project is assessed.
5. Decision Tree analysis	-	-	The case project has 32 scenarios with two main scenarios in the first period. Depending on the demand in each period, the company should react accordingly, for example, if the demand in a period is low, and the sales drop by 10%, then the company needs to invest additional 1,5% of sales of this period in advertising. Considering all the scenarios it can be concluded that the project does not tolerate even the slightest decrease in the sales in any of the periods, and therefore contains high risks.	Future-oriented flexible planning allows taking probabilities and risks into consideration. Depending on certain market changes, the company is expected to react accordingly.

The calculations support the decision made by the case company to accept the Terranova City Mall project, while carefully monitoring the market demand and the sales in each period and controlling the internal operations of the store and store management.

## **6.2 Guidelines for the investment strategy**

The research revealed some problems the case company encountered when making significant investment decisions. Some illustrations of these problems are a poor initial investment analysis and further insufficient investment management. The cause of these problems is the absence of a comprehensive investment strategy and clear investment goals, which results in poor investment planning and control. Therefore, an essential step in the research process was defining the guidelines for the company's investment strategy.

As have been mentioned above, it is essential to define a feasible strategy that will guide the company in making the most efficient investment decisions. The starting point of the strategy development process is defining clear investment goals both monetary and non-monetary. Monetary goals may include, for example, an increase in the market share, whereas, non-monetary goals also suggest customer satisfaction, increased brand awareness and so on as important strategic benefits for the company. During this period, it is very important to set measure and targets, against which the goal achievement will be assessed.

After the goals are established, the company is faced with various action plans to achieve their goals. The plan of actions greatly depends on the market conditions the company is working in, as well as the company's individual resources. Therefore, in order to realize the most appropriate plan the company needs to conduct thorough analysis. This analysis is carried out at the pre-investment period. At this stage several important steps are followed:

- Market analysis (demand, niche, customers, competitors)
- Company resources (equity/debt, labour, time, facilities)
- Location selection (balance brand – place, number of customers, transformation coefficient)
- Risk identification and risk management
- Financial analysis (NPV, DPP, risk analysis, etc)

After the pre-investment period is completed, the company can decide on realizing an investment project based on a multilateral analysis of the market situation, company's capabilities and the project's potential.

During the actual implementation of the project, careful control and monitoring from the company's part is essential to make sure that everything is going according to the previously accepted investment strategy. In order to do so the company needs to assign a responsible person who will manage the investment throughout its lifespan. In case of any red flags, the person should identify the reasons for them and take appropriate preventive measures.

The stages of the strategic investment decision-making process can be illustrated in figure 8.

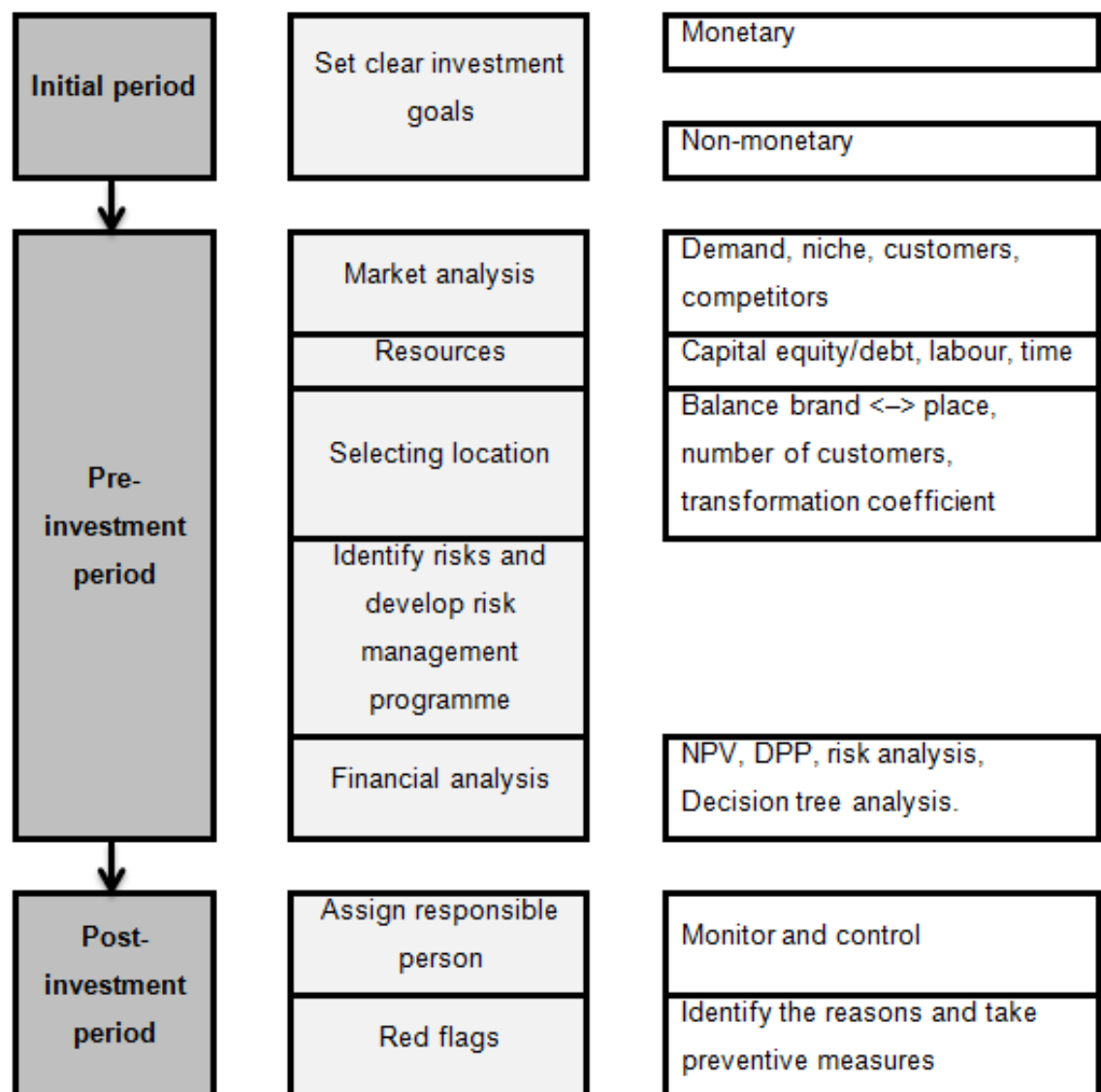


Figure 8. Strategic investment decision-making process

### 6.3 Reliability and validity

Although the investment project has been assessed based on the generally applicable investment appraisal techniques, the guidelines for the investment strategy of the case company were developed specifically for the company working with franchise investments. This fact creates a limitation for the companies working with different kinds of investment projects.

Moreover, the strategic guidelines incorporate the special needs and conditions that are true only for the case company. Therefore, it is not advisable to utilize the guidelines as they are without carefully analyzing conditions of a certain company. Among others, these conditions include market demand and market share, industry, company's size, available recourses, customer segment and management style. Depending on a company's individual needs and characteristics, certain changes have to be made to the original guidelines.

### 6.4 Analysis of own learning

The thesis process consisted of six (6) main research stages (see table 2):

1. Benchmark good investment practices existing in the company.
2. Identify weak spots and opportunities for improvement in the present investment strategy.
3. Introduce suggestions for improvement based on the data previously acquired.
4. Assess the new investment project by calculating its profitability with help of investment appraisal techniques and tools.
5. Advice on realizing the investment based on weighty arguments and calculations.
6. Develop the final investment guidelines for the company based on the data obtained through the research.

Each stage comprised several tasks that helped developing skills in various fields, from financial and investment knowledge to communication skills. Table 21 provides detailed information on the personal learning during the thesis process.

Table 21. Personal learning

Research stages	Acquired skills
Benchmark good investment practices existing in the company.	<ul style="list-style-type: none"><li>• Learning various questionnaire techniques.</li><li>• Developing structured interviews.</li><li>• Improving soft skills in conducting interviews.</li></ul>
Identify weak spots and opportunities for improvement in the present investment strategy (if such strategy exists).	<ul style="list-style-type: none"><li>• Analytical skills.</li><li>• Deduction skills.</li></ul>
Introduce suggestions for improvement based on the data previously acquired.	<ul style="list-style-type: none"><li>• Problem-solving skills.</li><li>• Decision-making skills.</li></ul>

Assess the new investment project by calculating its profitability with help of investment appraisal techniques and tools.	<ul style="list-style-type: none"> <li>• Financial and investment knowledge (various investment appraisal methods).</li> <li>• Knowledge in the concept of franchising and its different types.</li> </ul>
Advice on realizing the investment based on weighty arguments and calculations.	<ul style="list-style-type: none"> <li>• Negotiation skills.</li> </ul>
Develop the final investment guidelines for the company based on the data obtained through the research.	<ul style="list-style-type: none"> <li>• Critical thinking.</li> <li>• Academic writing skills.</li> </ul>

Together with the above stated skilled gained during the research process, two very important skills have been acquired - responsibility and self-management. Thesis is the triumphal completion of the bachelor studies in HAAGA-HELIA University of Applied Sciences. However, it does not only require broad knowledge in the various business disciplines, but also lots of self-motivation and determination, which go hand in hand with hardworking and strict time-management.

The thesis opens up an interesting discussion both on the global franchising and the investment appraisal. One of the development ideas can include creating general strategic investment guidelines that can be applied for different companies. Another idea is to research different franchises from the point of view of young entrepreneurs and growing companies willing to start or expand their business by purchasing rights of one of the global franchises.

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**Appendix 1. Questions and answers from the interview 1**

Interview conducted: 3 July 2014

Questions presented:	Answers (brief summary):
1. Does the company have an existing investment strategy? If so, please describe it.	No consistent investment strategy, however, the company follows certain rules when making investment decisions: to invest in uncertain projects only (low to medium risk); a part financed by own resources should not be less than 70%; thorough market analysis should be implemented and budget forecasted.
2. What methods to analyse large capital expenditures are used in the company?	Preliminary market analysis on direct competitors, demand, brand image, niche, potential customers, etc. is conducted. Later on the NPV and the DPP methods are generally applied.
3. Describe previous franchise projects. How would you define the reasons of success/failure of a particular project?	The company is actively investing in various franchises. Sinequanone, a French clothing brand, is an investment failure (poor market and financial analyses). Successful investments are (among many others) Mango, Terranova, S'Oliver, Orsay (careful analysis, existing high demand, appropriate location).
4. What is your current investment project?	New project is a change investment. The brand in question is Terranova (Samara).
5. How essential is it to invest in this particular franchise brand?	Extremely important, as now the store is generating constant losses. New location can help to open up the true potential of the Terranova store in Samara.
6. Is there unmet demand for this brand?	Terranova is a cheap clothing brand designed for teenagers and young people. Regardless of the low-quality products, the brand found its niche and has a very stable position there with high profits.
7. How do you assess the risk level of the new project?	According to the forecasts and the existing demand, the project is rather uncertain than risky.
8. Are there any alternative investment projects that the company is interested in implementing?	The company is running a couple of other projects in different cities. Currently, a purchase of a new franchise is being discussed.

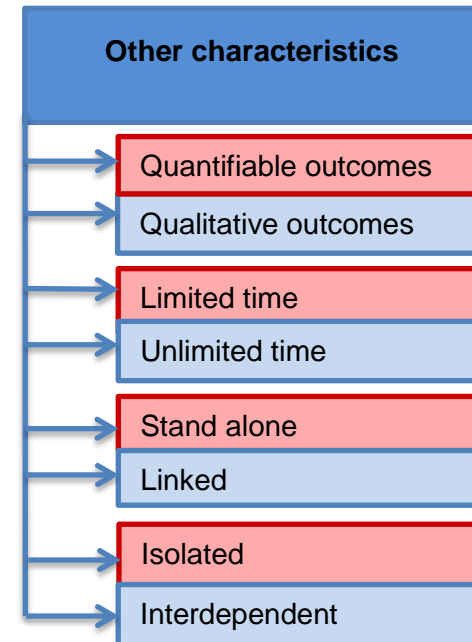
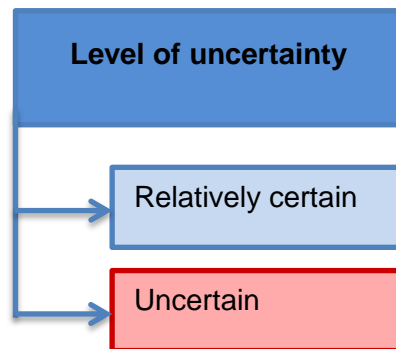
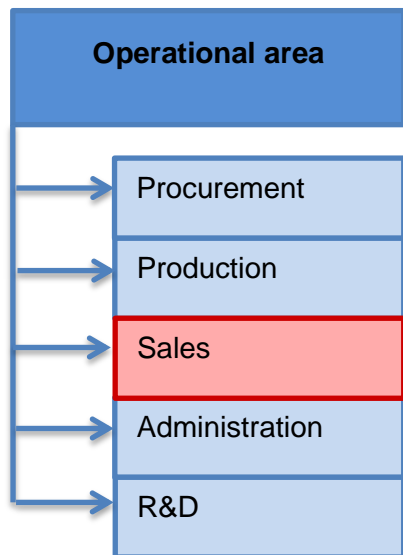
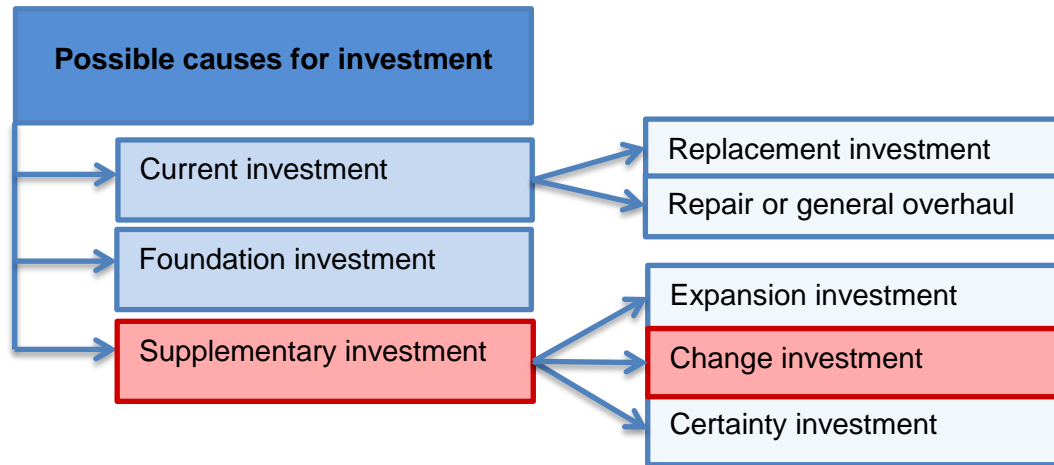
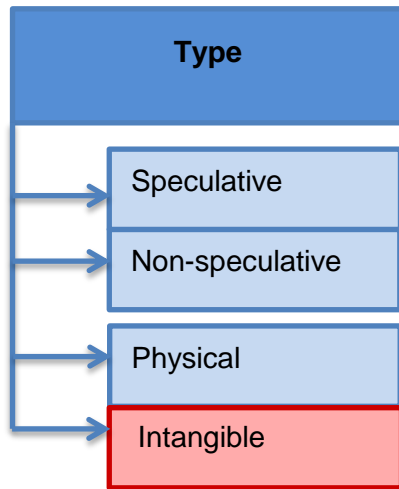


## Appendix 2. Financial checklist for the interview 2

Interview conducted: 22 July 2014

<b>Basic data on the investment:</b>
<ul style="list-style-type: none"><li>- Initial outlay<ul style="list-style-type: none"><li>o including entrance fee, hidden costs, etc.</li></ul></li><li>- Economic life</li><li>- Discount rate</li><li>- Annual cash outflow<ul style="list-style-type: none"><li>o including rent, operating costs, fixed costs, etc.</li></ul></li><li>- Annual cash inflow<ul style="list-style-type: none"><li>o including sales, discounts received, etc.</li></ul></li></ul>
<b>Sensitivity analysis:</b>
<ul style="list-style-type: none"><li>- Monthly sales</li><li>- Estimated minimum and maximum sales</li><li>- Probability distribution for each scenario</li></ul>
<b>Risk Analysis:</b>
<ul style="list-style-type: none"><li>- Possible variations (%) from the average sales</li><li>- Probability distribution of variations</li></ul>

### Appendix 3. Classification of investments

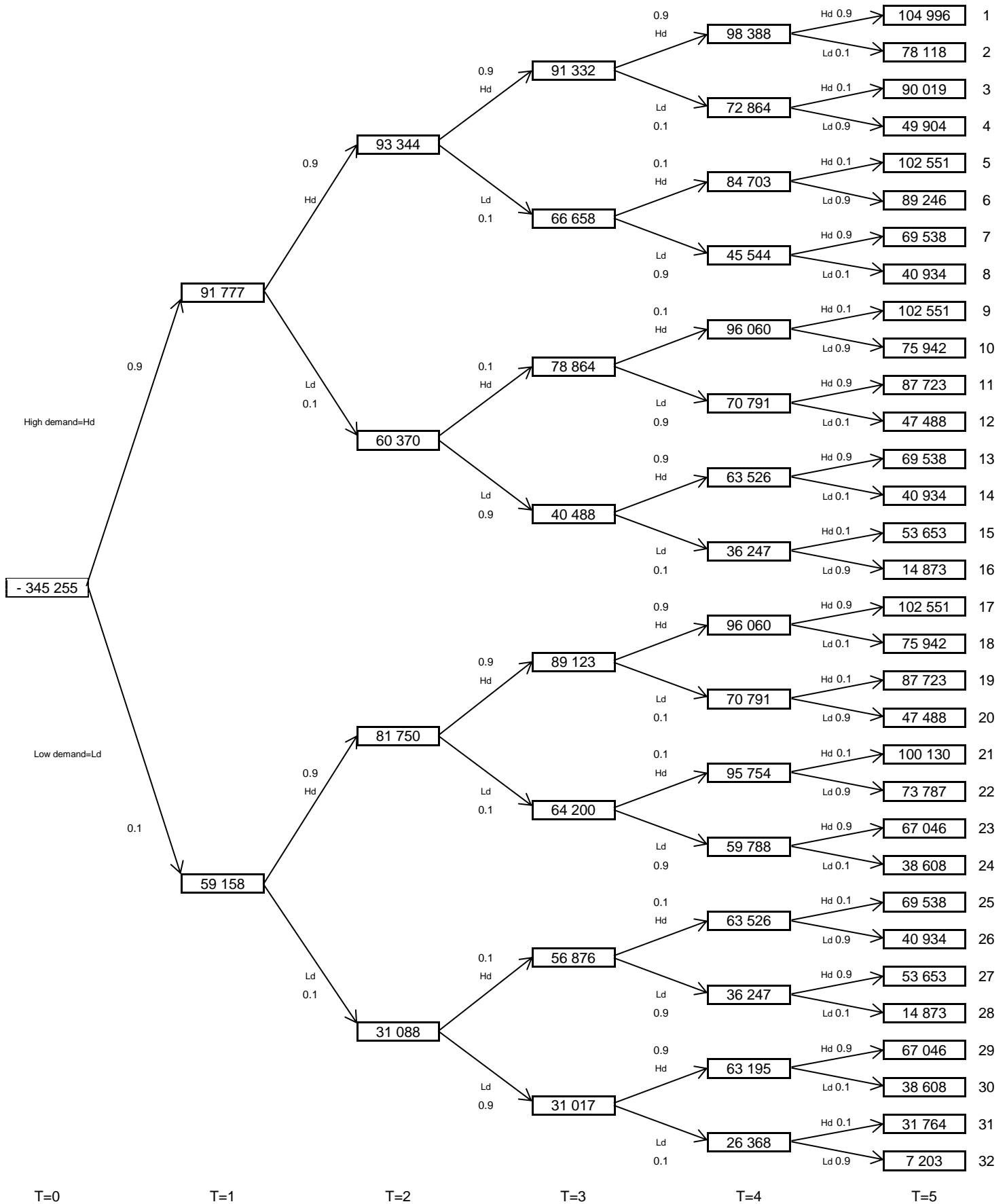


## Appendix 4. Estimated sales for the Terranova City Mall project

Financial data provided during the interview 2 on 22 July 2014

	Scenario for 1st year		Scenario for 2nd year		Scenario for 3rd year		Scenario for 4th year		Scenario for 5th year	
	€	%	€	%	€	%	€	%	€	%
<b>Total Sales</b>	<b>1 207 800</b>		<b>1 328 580</b>		<b>1 461 438</b>		<b>1 607 582</b>		<b>1 768 340</b>	
18% VAT	184 241	18,0	202 665	18,0	222 931	18,0	245 224	18,0	269 747	18,0
<b>Breakeven</b>	<b>1 119 102</b>		<b>1 227 068</b>		<b>1 362 958</b>		<b>1 474 205</b>		<b>1 652 410</b>	
<b>Net Sales</b>	<b>1 023 559</b>	<b>100,0</b>	<b>1 125 915</b>	<b>100,0</b>	<b>1 238 507</b>	<b>100,0</b>	<b>1 362 357</b>	<b>100,0</b>	<b>1 498 593</b>	<b>100,0</b>
Cost of goods sold	587 523	57,4	668 794	59,4	760 443	61,4	850 111	62,4	950 108	63,4
<b>Gross Margin</b>	<b>436 036</b>	<b>42,6</b>	<b>457 122</b>	<b>40,6</b>	<b>478 064</b>	<b>38,6</b>	<b>512 246</b>	<b>37,6</b>	<b>548 485</b>	<b>35,6</b>
Transport	13 890	1,4	15 279	1,4	16 807	1,4	18 487	1,4	20 336	1,4
Advertising	17 500	1,7	24 811	2,2	26 391	2,1	28 040	2,1	30 299	2,0
Personnel Commissions	9 662	0,9	10 629	0,9	11 692	0,9	12 861	0,9	14 147	0,9
Credit Card Commission	4 529	0,4	4 982	0,4	5 480	0,4	6 028	0,4	6 631	0,4
Shrinkage	3 623	0,4	3 986	0,4	4 384	0,4	4 823	0,4	5 305	0,4
<b>Total variable costs</b>	<b>49 205</b>	<b>4,8</b>	<b>59 686</b>	<b>5,3</b>	<b>64 754</b>	<b>5,2</b>	<b>70 239</b>	<b>5,2</b>	<b>76 718</b>	<b>5,1</b>
Rent	100 500	9,82	101 332	9,00	111 466	9,0	122 612	9,0	134 873	9,0
Rent	3 600	0,35	3 780	0,34	3 969	0,32	4 167	0,31	4 376	0,29
Adv.Trade center + service charges	20 440	2,0	21 462	1,9	22 535	1,8	23 662	1,7	24 845	1,7
Utilities	17 520	1,7	18 396	1,6	19 316	1,6	20 282	1,5	21 296	1,4
Personnel	69 300	6,8	71 379	6,3	73 520	5,9	75 726	5,6	77 998	5,2
Salary Taxes	23 689	2,3	24 602	2,2	25 564	2,1	26 576	2,0	27 643	1,8
Bank Guarantee expenses	12 900	1,3	12 900	1,1	12 900	1,0	12 900	0,9	12 900	0,9
Backend Expenses	1 000	0,1	1 000	0,1	1 000	0,1	1 000	0,1	1 000	0,1
Others	2 000	0,2	2 000	0,2	2 000	0,2	2 000	0,1	2 000	0,1
Materials	18 424	1,8	20 266	1,8	22 293	1,8	24 522	1,8	26 975	1,8
Travel	2 000	0,2	2 000	0,2	2 000	0,2	2 000	0,1	2 000	0,1
Maintenance	18 000	1,8	18 900	1,7	19 845	1,6	20 837	1,5	21 879	1,5
<b>Total Fixed costs</b>	<b>289 372</b>	<b>28,3</b>	<b>298 018</b>	<b>26,5</b>	<b>316 407</b>	<b>25,5</b>	<b>336 284</b>	<b>24,7</b>	<b>357 784</b>	<b>23,9</b>
<b>EBITDA</b>	<b>97 458</b>	<b>9,5</b>	<b>99 417</b>	<b>8,8</b>	<b>96 901</b>	<b>7,8</b>	<b>105 722</b>	<b>7,8</b>	<b>113 982</b>	<b>7,6</b>
Depreciation	63 050	6,2	63 050	5,6	63 050	5,1	63 050	4,6	63 050	4,2
Depreciation entrance fee	6 000	0,6	6 000	0,5	6 000	0,5	6 000	0,4	6 000	0,4
<b>EBIT</b>	<b>28 407</b>	<b>2,8</b>	<b>30 366</b>	<b>2,7</b>	<b>27 851</b>	<b>2,2</b>	<b>36 672</b>	<b>2,7</b>	<b>44 931</b>	<b>3,0</b>
<b>Results Before Taxes</b>	<b>28 407</b>	<b>2,8</b>	<b>30 366</b>	<b>2,7</b>	<b>27 851</b>	<b>2,2</b>	<b>36 672</b>	<b>2,7</b>	<b>44 931</b>	<b>3,0</b>
Corporate tax (20%)	5 682	0,6	6 073	0,5	5 570	0,4	7 334	0,5	8 986	0,6
<b>Net Profit</b>	<b>22 726</b>	<b>2,2</b>	<b>24 293</b>	<b>2,2</b>	<b>22 280</b>	<b>1,8</b>	<b>29 337</b>	<b>2,2</b>	<b>35 945</b>	<b>2,4</b>

## Appendix 5. Decision tree for the Terranova City Mall project



**Appendix 6. NPV and weighted NPV of the scenarios 1-32 for the Terranova City  
Mall project**

<b>Scenario</b>	<b>NPV</b>	<b>Probability</b>	<b>Weighted NPV</b>
1	16 337	0,59049	9 647
2	-352	0,06561	-23
3	-10 396	0,00729	-76
4	-35 304	0,06561	-2 316
5	-13 066	0,00081	-11
6	-21 327	0,00729	-155
7	-60 310	0,06561	-3 957
8	-78 071	0,00729	-569
9	-23 390	0,00009	-2
10	-39 912	0,00081	-32
11	-49 855	0,00729	-363
12	-74 838	0,00081	-61
13	-94 942	0,06561	-6 229
14	-112 703	0,00729	-822
15	-123 437	0,00081	-100
16	-147 516	0,00729	-1 075
17	-27 666	0,06561	-1 815
18	-44 188	0,00729	-322
19	-54 132	0,00081	-44
20	-79 115	0,00729	-577
21	-48 104	0,00009	-4
22	-64 460	0,00081	-52
23	-93 211	0,00729	-680
24	-110 869	0,00081	-90
25	-136 484	0,00001	-1
26	-154 245	0,00009	-14
27	-164 979	0,00081	-134
28	-189 059	0,00009	-17
29	-157 684	0,00729	-1 150
30	-175 343	0,00081	-142
31	-204 745	0,00009	-18
32	-219 996	0,00081	-178